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January 1925

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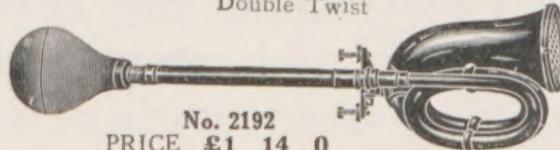
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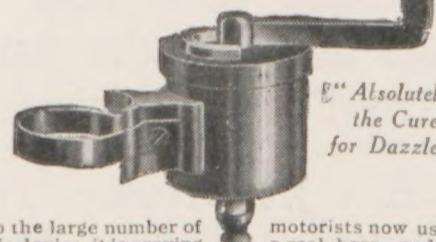


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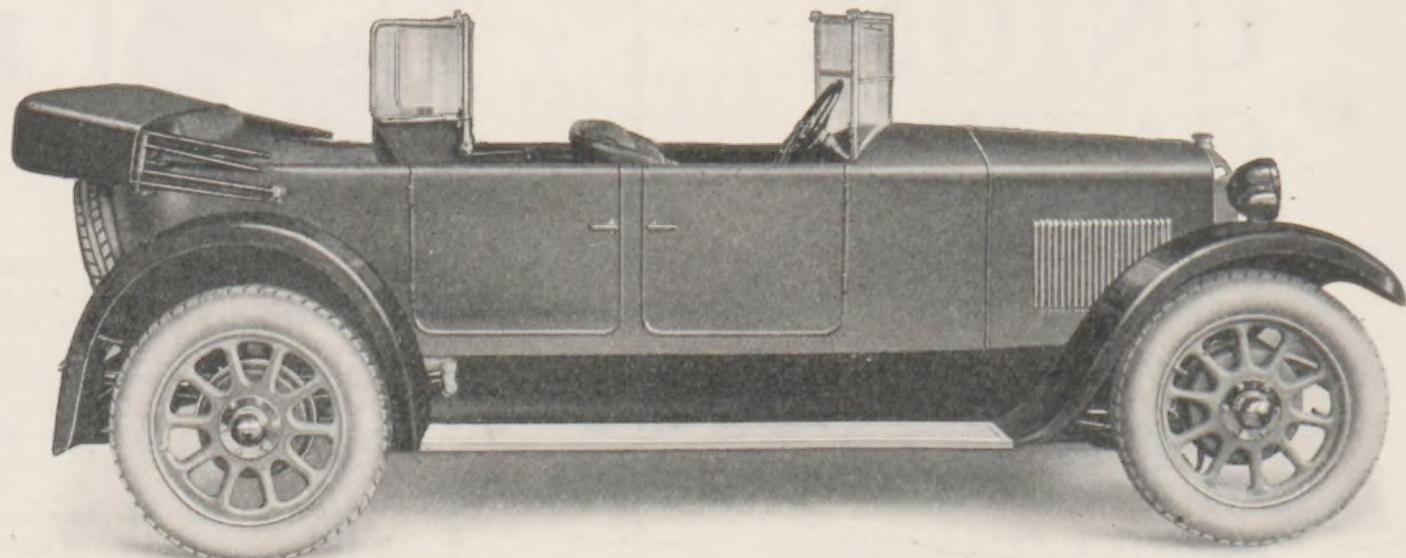


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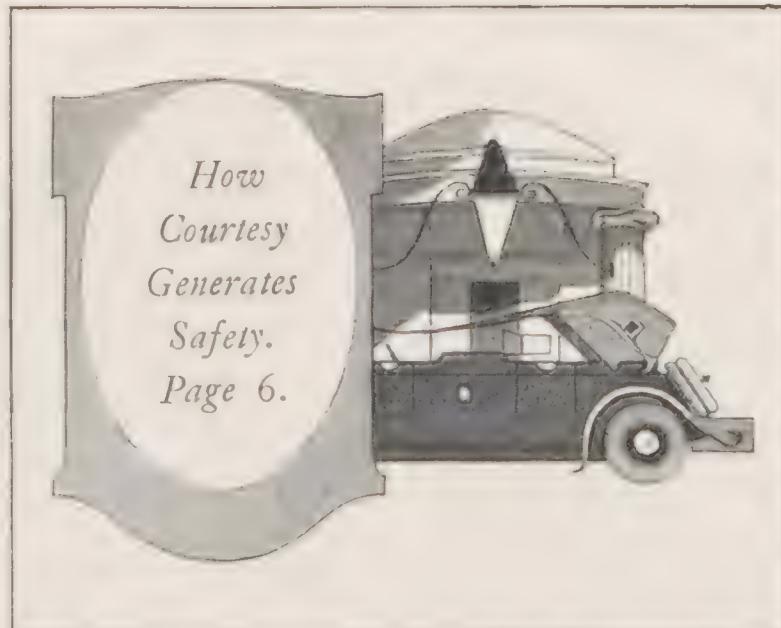
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THE MOTOR-OWNER

JANUARY
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NO. 68

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The Editor will be pleased to consider contributions of special interest to the car owner, provided they are of high quality and in every way suitable to the magazine. Short illustrated articles are preferred, dealing with any aspect of private motoring, either as regards touring or the home management of the car. First-class snapshots of roadside scenes or incidents are particularly desired. All photographs and sketches should be fully titled on the backs and bear the name and address of the sender.

Contributions should be addressed to the Editor of "The Motor-Owner," 10, Henrietta Street, W.C.2, and should be accompanied by a stamped, addressed envelope. While every effort will be made to return them if unsuitable, the Editor cannot hold himself responsible in case of loss or damage.

A WOLSELEY SALOON AT BURNHAM BEECHES.



"Sweet country life, to
such unknown
Whose lives are others',
not their own !



But serving courts and
cities, be
Less happy, less en-
joying thee."



SEEN THROUGH THE SCREEN.

"The Motor Owner" wishes its readers a Happy and Prosperous New Year.



In Air and on Land.

TET another suggestion has been made for alleviating the traffic congestion of our big cities and towns.

The particular one in question emanates from Sir Charles Wakefield, Bart. His idea is a sort of combined aeroplane and light motor-car.

This machine would be driven by a propeller. It would be provided with wings which could be folded back whilst the "aero-auto" was performing its functions on land, and expanded when it took to the air. Presumably it would keep to the road until a traffic block occurred, then soar above the congestion.

There is fascination for the motorist in the thought of a journey under these conditions from, say, Aldgate to the Brompton Oratory. You would "take off" just before you reached the pump; fly over the city, smiling gaily at the ranks of waiting traffic beneath you, and come to earth again at Hyde Park Corner.

Of course there is a strong doubt as to whether the expedient would not be a mere transference of difficulties. We might block the air as well as, or instead of, the roads. In which case we should have to carry the idea a little further, by instituting point policemen in "sausage balloons" to regulate the "aero-auto" traffic.

However, we need not anticipate trouble. Sir Charles merely offers the suggestion tentatively. He provides no working model at the moment, but no doubt feels that the vision of to-day is the accomplished fact of to-morrow. Did not Jules Verne put a submarine into fiction many years before an inventor put one beneath the ocean? And another novelist anticipated the Bristol Channel electricity scheme fourteen years ago.

A Dissertation on Marriage.

A disgruntled Benedick acquaintance once held forth to us on the subject of marriage. Presumably he had left a marital breakfast squabble on the ice,

ready to be resumed when he arrived home for dinner.

He described the Holy State "as a liberal education," but added "that it was questionable whether a man wouldn't be happier as an ignoramus!"

We preferred to express no opinion upon such a debatable subject; but a strong sense of justice demands that we should present an incident showing the other side of the picture.

The story concerns a widower, aged 80, domiciled in Nevada, U.S.A., whose previous experience had been so happy that he desired to enter again for the Matrimonial Stakes.

His sons, however, held different views on the subject, and proceeded to put them into operation. As the octogenarian votary of Cupid entered the church doors to put the seal upon his love, he was seized by his progeny, who hustled him into a waiting motor-car and whirled him away to a destination unknown.

The offices of THE MOTOR OWNER are situated in an excellent position for observing the preliminary paddle of those entering upon the troubled seas of matrimony. Right opposite the editorial windows there is a passage leading to the Church of St. Paul, and a few doors to the west are situated the business premises of the St. Martin Registrar of Marriages.

The unmarried members of the staff are keeping watchful eyes upon both these points of interest, in the hope that the Nevada incident will be duplicated in Henrietta Street. The married ones, having crossed the Rubicon, are philosophically *blasé* concerning the matter.

Anyway, nothing so exciting is likely to occur—we Britons are so prosaic!

The Inordinate Cup.

We are at one with the authorities in the desire that condign punishment shall be inflicted upon motorists who are drunk whilst in charge of a car.

Having made our attitude in this matter quite clear, we can proceed to

express our profound distrust of the methods by which efforts are made to prove the offence.

Whilst it is of vital importance that culprits should be detected, it is of equal importance that the innocent should not be unjustly accused and, possibly, convicted. Unfortunately, recent events rather point to the fact that there is at least a possibility of this taking place.

The onus for this state of affairs does not rest with the administrators of the law, whether they be judicial or administrative; but with the police surgeons, whose duty it is to report upon the condition of the charged person when he, or she, is brought to the police station.

Possibly we may be unjust in saddling these gentlemen with the responsibility. It may be that they are bound by rules and regulations as regards tests for drunkenness; although surely a great amount of discretion must be left to their personal judgment?

However that may be, the gravamen of our complaint is concerned with these so-called tests; and we are glad to note that our humble opinion of them is confirmed by several medical men of very high standing in their profession.

Can there be anything more unconvincing than the various phrases which the supposedly drunken person is required to repeat? At any time these "word-twisters" are absurd, and difficult, but they become positively appalling when somebody's reputation, and liberty, depend upon their correct pronunciation. We tried some of them upon a staunch teetotal colleague, and he came "unstuck" at every colloquial fence.

Then there are the physical tests upon which reliance is placed—the walking a straight line, or standing on one foot with both eyes closed manœuvres. There are perfectly sober men who can perform neither of these feats.

In fact, to quote medical opinion

GOOD-BYE, SPEED LIMIT.

again, there are many symptoms which are common both to drunkards and to people suffering from certain nervous diseases.

The case of a motorist who was discharged after being certified as drunk by a police surgeon will be fresh in the public mind. Independent medical evidence as to his sobriety immediately after the examination ensured his acquittal. But one wonders what would have happened had he been precluded from obtaining such help by reason of perfectly legitimate physical prostration.

Take, for instance, the case of a man who is involved, and slightly injured, in an accident whilst driving a car. Our hypothetical motorist is perfectly sober, but just previous to the accident he has drunk a glass, or even two glasses, of wine. He would naturally be unsteady from shock, and it is quite possible his breath might be tainted by the wine.

We know that a man placed in such a position has a right to claim an independent medical opinion; but this unfortunate wight is too dazed to exercise that right. Frankly we are anxious as to whether our present system ensures his receiving justice.

We agree with Shakespeare that "Every inordinate cup is unblessed, and the ingredient is a devil"; but do the authorities take proper precautions to ensure that the cup is inordinate?

The Old Order Changeth.

If the new Government Bill concerning motor legislation becomes law, we shall, at last, get rid of the ridiculous 20 mile per hour speed limit.

Of course this rule has been "more honoured in the breach than the observance" for many years past, but, nevertheless, its shadow has dogged the motorist; and, in many cases *his* substance has been extracted to preserve the illusion!

Although this relief from an obsolete enactment will be welcomed by all car-owners, it must not be forgotten that their responsibility for the safety of the general public will by no means be diminished by the new law. On the contrary, it will be increased both morally and legally.

The various local authorities who have fixed speed limits for the towns and villages they represent will have to abolish their notices. But sane drivers have always recognised the necessity for adjusting their speed to prevailing circumstances without printed warnings; and we are afraid



Don't you remember when you tried turning for the first time?

that the injunctions have little or no effect upon irresponsible drivers.

A hearty welcome will be extended to any additional penalties the new Act may inflict on this comparatively small but extremely virulent section of the motoring community.

A Dream of a "Dream."

We refer, of course, to "A Midsummer Night's Dream," produced at Drury Lane on Boxing Night.

This very remarkably staged revival recalls inevitably to the mind an old controversy: "Should Shakespeare be

'produced' or only acted?" This question was debated fiercely in the days of Tree's unforgettable productions and, succumbing to his passion for experiment, Sir Herbert gave several performances of Shakespeare's plays without scenery. The artistic result remains debatable, but the commercial one was sufficiently definite. "Unproduced" Shakespeare was also unproductive Shakespeare, we repeat, commercially.

Undeniably, however, "A Midsummer Night's Dream," of all the bard's plays, most demands and most lends itself to production; and Mr. Basil Dean is much to be congratulated upon his fulfilment of that demand. Mendelssohn's music, dancing elves, flying fairies, amazing stage pictures, make an entrancing whole. We envied every child in the audience. To the wondering eyes of youth, it must indeed have been a perfect dream of a "Dream."

The acting is uneven, but never uninteresting. The "Titania" of Gwen Ffrangcon-Davies is altogether charming and in the picture; and Mary Clare is an excellent "Hippolyta." Leon Quartermaine, whom we have never known give an unfinished performance, added another success to his long list as "Lysander." If Athene Seyler flavoured "Hermia" with the faintest *soupçon* of the twentieth century, after all human nature (and she made Hermia human) is always modern, is it not?

Last, but by no means least, D. Hay Petrie and Wilfrid Walter, erstwhile favourites at the "Old Vic," fulfilled every expectation in the important and exacting parts of "Puck" and "Bottom."

The Ruling Passion.

During the fog a motorist collided with an omnibus in passing. The car was badly knocked about, but the omnibus escaped with scratched paint-work. The unfortunate motorist strove for cheerfulness in adversity. To the sympathetic remark of the 'bus driver concerning a "mess up" he replied, "Yes, a *General* mess-up," indicating the damaged 'bus title.

Then the voice of his small daughter piped up from the rear seat: "That's the word, father. The leader of an army—General! I shall win the cross-word puzzle. *How clever of you to do it!*"

It was the last straw. The motorist's words, though inaudible, became not only cross, but unprintable!



The feelings of a man who has just bought a second-hand car.

D O Y O U R E V E R S E ?



In regard to the gentle art of reversing, as with most other things, practice does make perfect.

ROAD COURTESY AS A NEW YEAR RESOLUTION.

HOW COURTESY GENERATES SAFETY.

By Captain E. de Normanville.

It is by no means all motorists who even know, let alone practise, the courtesies of the road. Yet there is such a code and the author shows how its adoption leads to greater road safety for all concerned.

ABOUT three hundred years ago Bacon wrote some words which might with profit be engraved on a tablet in letters of gold, and then fixed on the dashboard of every motor car. As times are hard for some of us, an equally good result could be obtained, no doubt, by using a baser metal, and leaving the wisdom to rely upon its own preciousness.

The words referred to are: "If a man be gracious and courteous to strangers, it shows he is a citizen of the world." And the value of the advice is just as applicable to-day as when Francis Lord Verulam penned it.

Its appeal is, of course, to all mankind; but I have ventured to appropriate it especially for motorists because courtesy is such an important factor in car driving. Moreover, it is a virtue which might with advantage be practised more generally by many motoring road-users.

In point of fact, the somewhat subtle differences between the rule of the road, the unwritten law of the road, and the courtesy of the road are not fully appreciated. We can all reel off the instructions connected with the former, but how many of us know, or knowing, put into practice, the gentle amenities of the two latter?

Yet it is highly desirable that the courtesies should be given their appointed place as well as the rules. The driver who has thought for the general well-being of his fellow wayfarers is far more likely to be a careful driver than the one who is only mindful of his own comfort and convenience.

Lest I should be dubbed a moralist with no concrete backing, let me put before you two or three examples that occur to me. For instance, two approaching drivers desire the use of the only available space in the centre

of the road. Each is anxious to "get through" before the other. Here we have an example of a situation which may develop into a source of danger. There is no absolute rule which governs the position, but there is an opportunity to exercise the unwritten law of the road.

The vehicle nearer to the open space should be allowed to utilize it, whilst the other is moved a little to the left, as a polite gesture of relinquishment. Incidentally, this movement is also a matter of common sense and safety.

But there are far too many drivers who fling courtesy and safety to the winds, and, irrespective of any moral right, increase speed to enable them to obtain the space.

Here we have an instance of my contention. The offender, by reason of his want of courtesy, becomes a danger to the community. If, like W. S. Gilbert, I was compiling a list of "society offenders who might well be underground," this individual would be on it. Yet stay, this article is written during the season of goodwill to all men; and perhaps the offender errs through ignorance—not intention. Let us act on this assumption, and give him an opportunity to improve.

The driver who has contracted the bad driving habit of overtaking on a bend when sufficient clear road is not actually in view, I should place in the same category. And as another companion he should have the man who overtakes a car which is already engaged in the same operation.

With regard to cars ascending or descending hills there is one rule to remember. It is that the driver nearer, at the existing speed, to the available road space has the right of way. In the event of there being any doubt in the matter, both law and politeness dictates that the driver who will be using the "normally proper side" of the road should have preference.

There is a popular fallacy that a regular code of courtesy exists as regards this matter of hill-climbing and descending, but with the exception of the rule to which I have already drawn attention, this idea is quite erroneous.

But road courtesy must not be confused with sex courtesy. The lady driver should not be placed on an exalted plane so far as actual motoring obligations are concerned. She (forgive me, fair dames) is a mere traffic unit bound by the same laws as mere man

so far as these occasions are concerned. She must follow out the rules of the game both written and unwritten; taking her share of the smooth and rough of the driver's lot. I hate to "rub it in," but there are certain fayre drivers who are not fair motorists,

In conclusion, I should like to take this opportunity of tendering the readers of my monthly articles my hearty good wishes for the New Year. May I couple with these kindly thoughts a suggestion? It is that they should, in season and out, politely, but strenuously, preach the gospel of road courtesy. I know they will practise it.



QUAINT AND PICTURESQUE BRENT PELHAM.

HAVE YOU VISITED THE PELHAMS?

YOU have heard of the Pelhams, of course! Have you visited them? No! What a pity! You have missed much, for a more pleasant one-day tour from London—away from the bustle and toils of the city, and hand in hand with Mother Nature; through narrow, undulating, and winding lanes, over hills commanding magnificent panoramas of the countryside, and all the time to the sweet accompaniment of the twitterings of birds in bewildering flights; to say nothing of the many quaint and interesting roadside features—would, indeed, be hard to find.

Look at our pictures. Few people know that the old lych gate at Anstey is also a lock-up, the view shown by the photo-



The old lych gate and one-man lock-up at Anstey.

NO? THEN YOU HAVE MISSED MUCH!!

graph being taken from inside the churchyard. The two lower pictures are: (left), the ancient stocks and whipping post at Brent Pelham—on the road bank near the fence; and this picture, with the lower right illustration, gives the reader an excellent idea of the many really beautiful thatch buildings—each a dream cottage, so to speak—in this district. The object of our trip was to make a friendly call, as pictured; but whether the reader has friends or not in Brent Pelham, a friendly feeling with the place is bound to result from a visit to this delightful village "off the beaten track." Moreover, with a good car, like the 14 h.p. Standard in our pictures, such a run is bound to be pleasant.

T. R. M.



The old stocks and whipping post at Brent Pelham, Hertfordshire.



One of the beautiful specimens of thatch cottages in the Brent Pelham district.

W H O ' S A W A Y A - W H E E L ?



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1 Mr. and Mrs. E. Halford Ross, who have recently returned from an extensive and adventurous tour in Spain, in their Cubitt car.

2 Happy smiles—those of Mr. and Mrs. Leslie Henson—at the wheel: an Albert car in this instance.

3 Sir Thomas Lipton finds the automobile a great help to him in his many activities—and has great faith in his Wolseley car.

4 Miss Calcott, daughter of the manufacturer of the Calcott car, is evidently highly pleased—may be it is with her little coupé.

5 A 40/50 Rolls-Royce car (built for use in India) beside a Hindu Temple near Madras. The owner is seen standing beside the car, and the figures in the background are taking part in a procession of the presiding deity in whose honour the temple is built.

P E O P L E A N D T H E I R C A R S .

6 H.R.H. The Prince of Wales shows active interest in the simple but efficient method of raising the hood of the Rolls-Royce. The picture was taken outside the house of Mr. James A. Burden, at Syosset, Long Island, the Prince's headquarters during his recent American visit.

7 A "hold-up." No, not by *highway-women*, but by active collectors for St. Dunstan's institution.

8 Mrs. Snowden Hadley snapped beside her beautiful Rolland Pillain car prior to taking a dip in the sea at Deauville.

9 The High Commissioner for Palestine, Sir Herbert Samuel, on his six-cylinder Sunbeam taken in front of his winter residence in Jericho.

10 Mrs. Fletcher who drove her specially built small Vauxhall from Boulogne to Aix le Bain and from Aix le Bain to Deauville.



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ON MYSTICISM, MOTORS AND MORALITY.

By Captain P. A. Barron.

The Gentle Art of Telling Lies in Print.

IN the very early days of motoring, when I was young and far less moral than I am now, I was employed on the staff of an enterprising and popular weekly publication which, in order to be up to date, included some notes on "Horseless Carriages."

In those days it was easy to provide interesting news about horseless matters, because very few people knew how cars worked—or why they didn't so often—so I was rarely contradicted. The few people who did know the difference between tube ignition and a surface carburettor were either personal acquaintances or experimenting manufacturers who hesitated to protest against my fiction for fear that I might tell the truth about their self-propelled horseless vehicles which so often needed horses, or, preferably, mountain battery mules to take them home.

In those early times the motoring journalist who could not provide a "scoop" for the popular press every week was not worthy to belong to the profession.

Having adopted a suitable alias, I did my duty, happily unhampered by overmuch technical knowledge which might have cramped my style.

Those were cheery times, but there were the dreaded "press days" when the happy-go-lucky literary staff were called upon to assist the editor "to put the paper to bed."

One of my most irksome duties was the cutting down and expanding of other people's literary products in order that they (the lit. prods.) might get into the spaces allotted, for this publication was designed on a symmetrical plan. All articles had to fit exactly into a column or a page, and when the proofs came in we always found that about half of them projected over the margins and the other half were too short. If you know nothing of the factory methods of popular journalistic production, you can hardly imagine what a hideous job it is every press day to get those condemned things to fit.

It is a comparatively easy matter to cut, because one merely hacks out the author's more florid sentences on which he prides himself, and one only has to stand the racket when he sees his emasculated work in print.

But expanding is the very deuce. One needs a fevered imagination and an entire lack of principles.

One press evening my editor had an important appointment with the lady who wrote the articles with a love interest, and he left me to do the expanding.

There was one article about ghosts, and it was about four inches short. This was easy, for people who like to read about spooks are credulous and, as they are already convinced that supernatural visitants appear to mortals, are always grateful for new proofs to support their faith.

The author had mentioned the customs of certain famous ghosts and had run out of ideas or information before he filled the second column. I had to carry on the ghastly work.

I remember I wrote that one of the strangest things about ghosts was that they are extraordinarily conservative in their habits and customs, and I mentioned the (purely imaginary) case of "The Ghost of Mulligatawny Towers." I have forgotten the precise fictitious name I gave the mythical castle, but I expect it looked all right.

Well, I wrote that this methodical spook had walked a certain pathway for three hundred years. Then a *nouveau riche* purchaser of Mulligatawny Towers had some alterations carried out and had a garage built across the spook parade—thinking to balk the ghost's nightly promenade.

The three hundred years' old habit was not to be broken by brickwork, I explained, and instead of curtailing its nocturnal constitutional, the ghost passed through the walls of the garage as easily as a draught through a jerry-built door.

I had still two inches to fill and my imagination had got a start, so I added corroborative evidence by mentioning the famous Spook of Spandaw Manor, who, like the Mulligatawny Ghost, was not disconcerted by bricks and mortar. In this case, I wrote, the owner of the Manor had the old-fashioned low ceiling raised about three feet. There had been a corridor overhead along which an ancestral ghost had been in the habit of walking for centuries, and the Lord of the Manor naturally thought that the spook would either succumb to modern improvements or step up to the higher level and perambulate the raised floor of the reconstructed corridor.

Instead, I explained, this ghost was unable to break his old habits and continued to take his nightly excursion

at the old level. He merely waded through the floor, so that his legs only could be seen from the hall below and his nebulous body above the waist was visible drifting without apparent effort along the corridor.

You would not think the public would swallow such spoof, would you? But I assure you I received sacks full of letters from enthusiastic psychical researchers demanding more precise information.

I did not supply it for sufficient reasons.

Well, that evening, after having expanded the ghost article, I sought refreshment and returned to the office to have a shot at an essay which purported to be written by a medical practitioner. I think it was actually written by a leg-pulling student who had been backing some losers and wanted to earn a dishonest guinea.

The article was headed "Deadly Poisons that Save Life," and, as in the former case, the infernal thing did not fit the page.

I was warming to my work, however, and I explained that among the virulent poisons that save life is the venom of a serpent peculiar to the island of Bhangshesh in the Malayan Archipelago.

I said that the bite of this serpent, known to the natives as the Dtinggii, will kill a healthy person in eighty seconds after contorting him with appalling agony; but if the person bitten happens to be suffering with an ague peculiar to this island, he is cured almost instantly, and invariably lives to a healthy old age.

I said that the native doctors carry these small serpents in bamboo cases, fitted with caps like fountain pens, and when they are required to cure an ague patient they remove the safety cap and let the serpent have a nip.

Again, you will not believe the credulity of the average readers of once popular publications, but I assure you, on the word of a writer who I fear you will now find it hard to believe, that the world simply mopped up that story and asked for more.

My paragraph, added to an otherwise dull article, was reprinted in the journals of the world. The last time I saw it, it had been expanded, improved, and illustrated with coloured pictures in a Sunday edition of an American newspaper. There was an immensely impressive picture of a native doctor wearing

MORE "HOT AIR."

feathers and beads, and curing a haggard patient by snakebite.

The bamboo, with the serpent within, was shown in a carefully executed sectional drawing.

Perhaps you find it hard to believe all these confessions—just because they are true. It is very rarely that people do tell the truth about lies. That Master of Philosophy, Mark Twain, was one of the few, and he laid it down as an axiom that, to prove a point in an argument, an invented "fact" or an alleged "quotation" from a famous author is worth more than close reasoning.

In one of his books he tells us that some Scotchmen were arguing about the pronunciation of certain words. Some said the Scotch peasantry pronounce "three" "thraw." One stated that they pronounced the word "three" as in English.

The world-beloved Mark joined in the argument, having nothing better to do, and being a chivalrous gentleman took the side of the weaker party. He boldly stated that the correct pronunciation was "liree."

In his own words, "there was a moment of astonished and ominous silence, then weather ensued. The storm rose and spread in a surprising way, and I was snowed under."

But the great Mark was not to be beaten. He made up a Scotch couplet, and then floored his antagonists by "quoting" it as an extract from a poem by Robert Burns.

The couplet was :

"There were nae bairns, but only *three*,
Ane at the breast, twa at the knee."

Mark, in his quaint style wrote: "It ended the discussion. There was no man there profane enough, disloyal enough, to

say any word against a thing which Robert Burns had settled. I shall always honour that great name for the salvation it brought me in a time of sore need.

"It is my belief that nearly any invented quotation, played with confidence, stands a good chance to deceive. There are people who think that honesty is the best policy. This is a superstition; there are times when the appearance of it is worth six of it."

The lovable Mark Twain was perhaps one of the most painstakingly truthful writers. He may have taken an impish delight in artistic fluff, but after he had enjoyed his fun he always gave the joke away.

In these days I doubt if it would be so easy as it was up to twenty-five years ago to tug at the legs of the British public. The simpler days when the ambitions of millions were summed up in the classic phrase "three acres and a cow" have been succeeded by a wider spaced area in which the proletariat prefer to leave the acres untilled and substitute a Cowley for the cow.

I believe bluffs to-day have to be rather more elaborate in order to succeed, but I suspect that they still "get across" occasionally.

For instance, now and again we read in our popular Press something like this:

"An invention of enormous importance to the warfare of the future is now being tested in the Motorenfabrik of Herr von Haben, who migrated to Holland after the Treaty of Versailles had restricted practical experiments in aeroplane engine design. It is rumoured that Herr von Haben has discovered a method of rendering aeroplanes, and, incidentally, motor cars, absolutely non-inflammable by driving them with an incombustible gas. The technical details are still secret, but

well-known scientists interviewed in London yesterday believe that the motive force is derived from an unnamed gas liquefied by enormous pressure and such low temperature as we formerly supposed could only be found in inter-stellar space. One drop of this liquid exposed to normal temperatures produces many thousands of cubic feet of gas, and it is supposed that this gas at enormous pressure provides the motive power.

"The motor-car of the future may, therefore, have, not an explosive engine, but one more like a hot air motor, having the even torque of a steam turbine and requiring neither gears nor clutch.

"The well-known manufacturer, Mr. Morris, whose full front page advertisement appears in this issue, when interviewed by our representative yesterday, said :

"We are at present turning out five thousand cars every six hours, and should be making eight thousand had it not been for the iniquitous abolition of the duties on foreign cars by the Socialist Government. Every additional thousand to our output enables us to reduce the price to the benefit of the public."

Asked to give his opinion on the new expanding gas or "hot air" engine, he said humorously that the late Government had, he hoped, used up all the "hot air."

I do not know if that item of news would be broadcast round the world. It is highly probable, and it will not surprise me in the least if I see it improved, "expanded," and illustrated by the very same American journal that "fell" to my snake story.

I shall so enjoy seeing the diagram showing how the engine works and a portrait of my invented inventor.



THE fine bronze statue of the late Marquess of Salisbury at the entrance to the grounds of Hatfield House, erected to his memory by his Hertfordshire friends and neighbours in recognition of a great life devoted to the welfare of his country. The Marquess was Premier in the latter portion of Queen Victoria's reign and in the first year of that of King Edward VII. Beside the statue stands an 11.9 Clyno car.



"INDUSTRY IS A LOADSTONE TO DRAW ALL GOOD THINGS."

THE STORY OF BRITISH PETROLEUM AND MINERAL OILS.

In this article the growth of a great British industry is briefly described. It is traced from its early small beginnings to its present magnitude.

ONE wonders how many motorists know that the petroleum and mineral oil industry had its birth in Great Britain.

If they think at all of the first time the liquid fuel which drives their cars appeared, their thoughts fly to the huge oil fields of America, Persia, Russia, and the Dutch East Indies. Yet the fact remains that neither petroleum nor mineral oils were commercial products before the Scottish mineral oil industry was started in 1851, although they had been used medicinally to a very limited extent previous to that event.

The man to whom we owe the first discovery was Dr. James Young, the son of a cabinet maker in Glasgow. He studied chemistry at evening classes, and so equipped himself for a post in one of the large chemical works then operating in the Manchester district. While there his attention was drawn by another Scot, Dr. Lyon Playfair, to a seepage of oil in a Derbyshire coal mine.

As the sources of animal and vegetable oils then used for lubrication and lighting were proving unequal to the demands being made upon them, it was thought that this mineral oil might provide a supplement. Young devised means for converting it into efficient lubricants and illuminants, but his method was no more than established when the source of the oil came to an end. He, however, had formed the opinion that the oil had been derived from coal by underground heat, and working on this theory, he sought for some species of coal from which oil might be prepared artificially.

He was successful in finding near Bathgate, Linlithgowshire, a seam of coal which precisely suited his purpose, for, by a process of distillation, it was capable of yielding up to 120 gallons per ton of what seemed to be a very valuable mineral oil. On the strength of this discovery Dr. Young, with two partners, established works near Bathgate, which speedily grew

into the largest chemical works of their day. By the early "sixties," however, this rare form of coal was becoming exhausted, and a substitute had again to be found. This was fortunately discovered in the oil shale in the district lying immediately to the east of Bathgate. No sooner had the transfer of the industry from the rich Boghead coal to the poorer shale been accomplished than natural petroleum, which had been discovered in America a few years previously, began to appear on the British market, which caused a severe decline in the value of products.

But the comparatively youthful industry, although severely shaken, was by no means utterly wrecked. The effect of the discovery merely made it close up its ranks. The numerous works in operation throughout the coal fields of the country were abolished, and eventually the industry became concentrated in the district where the first works had been founded.

Here, in spite of severe foreign competition, it has, as a whole, made steady progress, as witness the statistics of shale output. In a normal year three million tons are mined and distilled.

This shale, by retorting, yields crude oil and ammonia liquor. The latter by a simple process is converted into ammonium sulphate. This commands a world-wide market as a fertiliser, and the quality of that produced by the Scottish oil industry is pre-eminent. From the crude oil, by a series of distillations and technical treatments the following range of products is obtained: Motor spirit, naphtha, paraffin wax, still coke, and burning, power, lighthouse, gas, cleaning, fuel, and lubricating oils.

Before these products are available for the market a long series of operations has to be gone through.

Within the last five years the Scottish industry has supplemented supplies of crude oil from shale by the refining of crude petroleum imported from Persia.

It would be most fascinating to describe in detail the preparation of these various products, but in a journal devoted to motoring matters the writer must confine himself to those used in connection with the car.

Dealing particularly with motor spirit, we find that, in order to obtain a closer fractionation, it is necessary to give it a still further distillation than that provided for the other products. This distillation is carried out in a bench of smaller stills, heated by steam and not by direct fire. Further refining consists of chemical treatments by means of caustic soda, sodium hypochlorite or sulphuric acids of various strengths, while the kerosene receives a finishing touch by filtration through bauxite. Bauxite is a clay which has the property of selectively absorbing certain of the constituents of petroleum.

In this instance it is imported from India, and it is prepared for use in granular form by heating to a definite temperature in long rotary furnaces. It is then cooled and filled into tall steel cylinders; into these the kerosene runs at the top and is drawn off from the bottom in a steady stream, having in its passage lost any characteristics which could be considered objectionable. After a time the efficiency of the bauxite becomes reduced and the stream of oil is then diverted to another vessel of bauxite while the first is emptied. The contents are again put through the rotary furnace, which has the effect of restoring the qualities.

The motor spirit thus evolved is the world-famous B.P.; and its producers are Scottish Oils, Ltd. For its preparation and that of their other products the company operates:—26 shale mines, 2 coal mines, 12 crude oil works, 5 refineries, 2 sulphuric acid works, 1 candle factory, and employs about 10,000 people.

Surely the magnitude of their business constitutes one of the miracles of modern British commercialism!

EVE GETTING HER MOTORING OUTFIT—
AND WHAT SHE DECIDED UPON!



MARY, MARY, QUITE CONTRARY.

By Martin H. Potter.

Our contributor deals with the story of a man, a maid, and a motor-car. The car needs an owner, and gets one.



A R L O T T A, Countess of Winslade-Welmot, was the bright spirit who thought out the scheme. The organisation fell to my lot. Lady Carlotta is a good woman, one of those *thoroughly good women* who love to wallow in indiscrimin-

ate charity.

For the life of me I cannot remember whether the particular one in question had for its object the provision of chest protectors for Port Said boatmen, or ice-cream freezers for Eskimos. It really doesn't much matter. The main point is that the good cause, whatever its nature, was to be advanced by a masked, fancy-dress ball, with a motor car as a prize for the best dress worn by a lady.

The sting of the scheme was concealed in its tail. If only both sexes could have competed, the trouble might never have arisen; but Her Ladyship, my cousin, decreed otherwise.

Having sprung the preliminary mine, Carlotta descended to details.

"The first thing to be done, Reggie, is to get a really attractive card. We shall want to write to people—shan't we?"

"We shall, indeed," I agreed gloomily, foreseeing the endless correspondence would fall on me.

"It should be something uplifting; something

which will stir their imagination," Carlotta continued cheerily.

"A mere manufacturer's picture of the car would answer the purpose," I remarked callously.

"No! no! no! These dealers are so prosaic, so unimaginative. It must be something 'arty' . . . romantic."

So the design finally decided upon was a happy blending of the ideal and the practical. In the middle distance we had the car, distinctly etherealised, but nevertheless a car. As its background, a dwelling which might have served to house Titania, with a mill

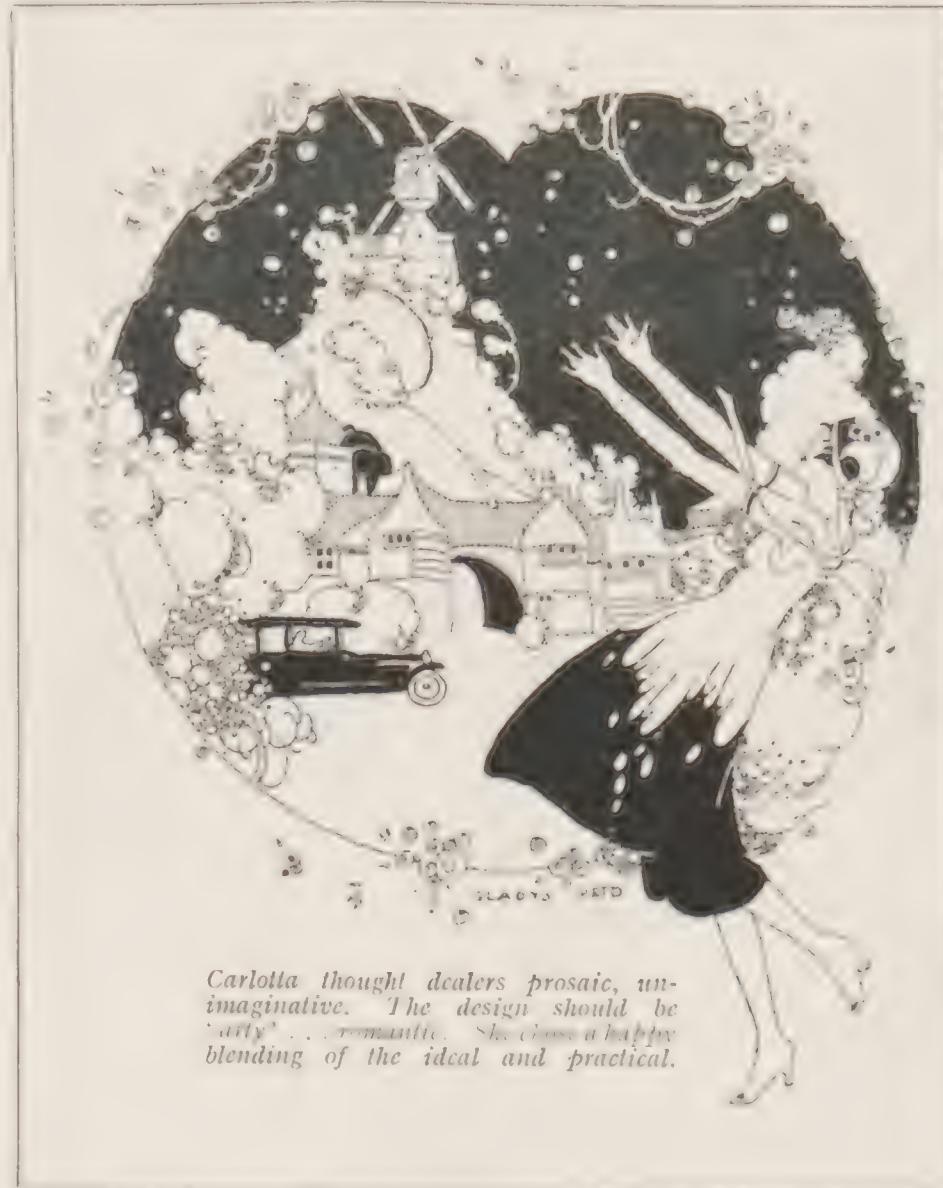
behind to grind grist for her fairy bread. The foreground was occupied by a charming feminine figure with arms stretched out longingly towards the car. The garments of the lady were distinctly unsuitable for motoring, but Carlotta insisted on introducing the fancy dress element.

Winslade-Welmot is the town from which the Earl, husband of Carlotta, derives his title. In due course its dovecots were fluttered by the receipt of one of these cards. On the obverse side there was an intimation that the ball would be held at the Town Hall, and that the tickets would be a guinea each.

Then the fun commenced. The applications for admission simply flowed in. The postmaster, hitherto a highly respectable citizen, gave vent to a flood of profanity every time the name of Reginald Malsham came under his notice, which it did about a hundred times a day. And Reginald Malsham solemnly cursed the moment when he weakly yielded to persuasion and became Honorary Secretary and Treasurer of the fund.

A week before the fatal night I received a notification that the 32 h.p. six-cylinder Montgomery, which was to be the prize, would be at the station the following morning.

In a moment of weakness I conveyed the information to Carlotta. This was fatal. My fair cousin as a Countess was not a howling success. She did not possess the stateliness, the moral weight, so to speak, for the job. But as a publicity agent she would have been the Napoleon of her profession.



Carlotta thought dealers prosaic, unimaginative. The design should be 'arty' . . . romantic. She chose a happy blending of the ideal and practical.

THE PLOT MATURES.

Her faculty for advertisement added fresh burden to my already overburdened life. Nothing would satisfy her except that we should make a triumphal tour of the county in the car. I had the utmost difficulty in making her abstain from rigging the 'bus like a ship, with a flag at the main, and a poster at the bows advertising the ball.

I eventually succeeded in weaning her from the bunting notion by promising to enlist the local press in her publicity stunt. The paragraphs they published, giving the times we should be at certain spots in her triumphal progress, had the effect she desired. To her joy, and my disgust, we were greeted by cheering and enthusiastic crowds.

The 32 h.p. Montgomery is a model I hold in great esteem, under ordinary circumstances, but if my wishes during that run could have materialised, its most excellent water cooling system would have boiled. In fact, its entire propulsive properties would have become deranged. At the moment I simply loathed it. However, nothing happened. We completed the journey; and the sale of tickets redoubled.

Three new characters now become entangled in my moving narrative. They shall be introduced in the order of their Winslade-Welmotese social importance. Firstly, then, meet as our Transatlantic cousins put it—Mrs. Marmaduke Thesaurus, relict of a wealthy Chicago moneylender born in the Land of No Liberty; naturalised as Thesaurus in the land rapidly losing it; secondly, Miss Rachel Cortoise, sister of Mrs. Marmaduke; thirdly, Mary, maid to Rachel Cortoise.

The prominent parts which they played in the comedy originated in another of Carlotta's ideas. As the primary object of the ball was to extract shekels from the well-lined purses of the townspeople, my cousin thought that none of her set should compete. She also thought that the judging for the prize would give

more satisfaction if it were performed by one of themselves.

In my opinion this was mere sophistry. Carlotta merely wanted to propitiate them with a view to further predatory onslaughts for her pet charities. However, a judge had to be found, and "Who more fitted with the necessary qualifications than Mrs. Marmaduke Thesaurus?" asked Carlotta.

"Pushful, but so *very, very* aurious," was her description of the lady.

"Easy prey?" I queried.

"*Difficile*, but persuadable," she amended.

So Mrs. Marmaduke was approached, and agreed to accept the position with

what I thought was suspicious alacrity. She may be said to have positively slopped over with gratitude.

Now the stone that my cousin tripped over was one which upsets many mental gymnasts. She thought that the possession of great wealth necessarily makes the owner disinterested and scrupulously honest. It doesn't.

Mrs. Marmaduke had watched and participated in the methods by which the fortune of the late Thesaurus, *née* Aaron, had grown from nothing to magnitude. No woman with such antecedents could be above suspicion. The old cent. per cent. acquisitiveness never dies; it only slumbers.

The good lady had seven cars of her own, one for every day in the week, but that didn't prevent her from coveting an eighth at the price of one guinea. From the moment she accepted the judicial position, she started to scheme to get that Thirty-two Montgomery for keeps.

As she couldn't very well both judge and compete, her thoughts turned towards her sister, Rachel Cortoise, who was entirely dependent upon her, and, consequently, very much under her thumb. You see the pretty plot. The prize to be awarded to the dress worn by Rachel, and then to join the remainder of the fleet in Mrs. Marmaduke's garage.

The moment arrives when Mary, maid to Miss Cortoise, takes a strong hand in the game. I cannot say how she came to discover the scheme, but I am given to understand that it is the business of a lady's maid to know all her lady's business. Judging by after events, it seems highly probable that Mary had sufficient wit to overcome any little difficulties of that sort. Whatever her methods, learn she did, and came hot a-foot to Carlotta with the news.

Here again is mystery. Why did she betray Mrs. Marmaduke to the Countess? Certainly she was engaged to Carlotta's chauffeur, but this does not seem an altogether adequate explana-



THE PLOT FRUCTIFIES.

tion. It is my belief that she was looking ahead even at this early stage. The minx wanted to involve us and silence our possible protestations, when the curtain fell on the comedy.

Of course, Carlotta had to drag me into the ghastly complication. She kept the maid, and telephoned me to come over.

Having heard the story, my advice was asked, merely as a matter of form. Carlotta had already determined on the necessary procedure.

"You must depose Mrs. Thesaurus," was my dictum.

"It would be a just judgment on her," agreed Carlotta, with unconscious irony. "But we must think of the charity. A scandal would wreck it."

What Carlotta really meant was that a scandal might wreck future charities.

"You mean that you'll allow this woman to perfect her nefarious wickedness?"

"No, no! Mary has made a suggestion that might get us out of the difficulty without any exposure. I don't altogether like it."—There was a twinkle in Carlotta's eyes which belied her statement.—"But, still, we must make the best of a bad situation. Mary's idea is that she should inveigle Miss Cortoise into the ladies' dressing-room just before the judging commences, and lock her in until it is over. Mrs. Thesaurus, failing to see her sister, will have to give the prize to some other dress."

I looked at the demure concocter of this truly Machiavelian scheme, and marvelled at Nature's cleverness in

concealing so much guile in such an innocent-looking envelope. Mary bore my inspection without lowering an eyelash. I took the line of least resistance, and surrendered at discretion.

At last the day of the ball arrived. My relief at the approaching end of my thankless task was tempered by fears that Mary's plan might miscarry. I do not set up for being any better than my fellows, but the possibility of Mrs. Marmaduke getting away with that car was positively appalling.

I wrestled with my conscience all through the hours of daylight, but with the evening brighter thoughts intervened. Visions of Mary the capable, decking the form of her mistress in "The Spirit of Spring"—that was the flowery designation of the guilty dress—came to me. I saw the designing maid getting in the finishing touches, her mouth full of pins and her brain full of plot, and was comforted. Mary was not made of the stuff that fails.

The ball was a huge success.

The parade was formed. Mrs. Marmaduke Thesaurus was enthroned in solitary state on the platform, and the competitors commenced to file before her. About a dozen had passed, when Carlotta, who was standing beside me, suddenly gripped my arm.

"Look! look!" she hissed.

I let my eyes follow in the direction indicated by hers, but could see nothing exciting. I turned a blank face back to my cousin.

"Oh, can't you see? Are you blind?" she wailed. "That dress . . . the girl numbered 40."

I glanced along the waiting queue again, and found the ticket 40 on a girl towards the end of the line.

"Well, what about it?" I asked.

But my question was unnecessary. Alas! I knew. Mary's boat had struck a snag, and foundered.

"Number 40 is 'The Spirit of Spring,' you idiot!" exclaimed Carlotta.

I moved down the hall to where a cluster of maids and attendants were clustered looking at the parade. Here I might hope to meet Mary, but she was not there. No doubt she was in some corner sobbing her heart out at her failure. Poor little soul, no doubt she had done her best. I went further in search of her, but with no result.

Coming back I passed the ladies' dressing room. The door was shut, but someone was imprisoned behind it. What was the mystery? Had Miss Cortoise turned the tables on Mary, and locked *her* in? Prudence carried me away from that door. Somebody else could open it.

I retraced my steps to the ballroom, and there I found Mary. She was not sobbing her heart out. On the contrary, she was smiling radiantly and bowing to an applauding audience. Clad in the "Spirit of Spring" dress, minus her mask, she stood by the side of a perplexed and furious judge, holding out the counterfoil of her admission ticket. Mary had not only incarcerated Miss Cortoise, but had duplicated and worn her dress!

As I remarked before, Nature is cunning—very cunning.



Travel the Sunbeam way All-the-Year-Round

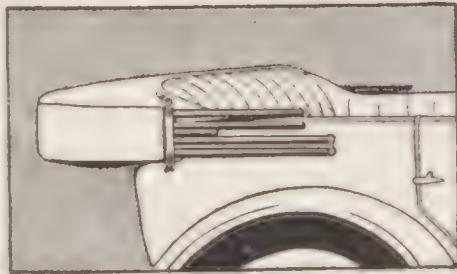


Fig. 1. Showing neat appearance when hood is folded and cover affixed.



Fig. 2. The hood is easily raised by one person.



Fig. 3. The side curtains are fixed and held securely by simple attachments.

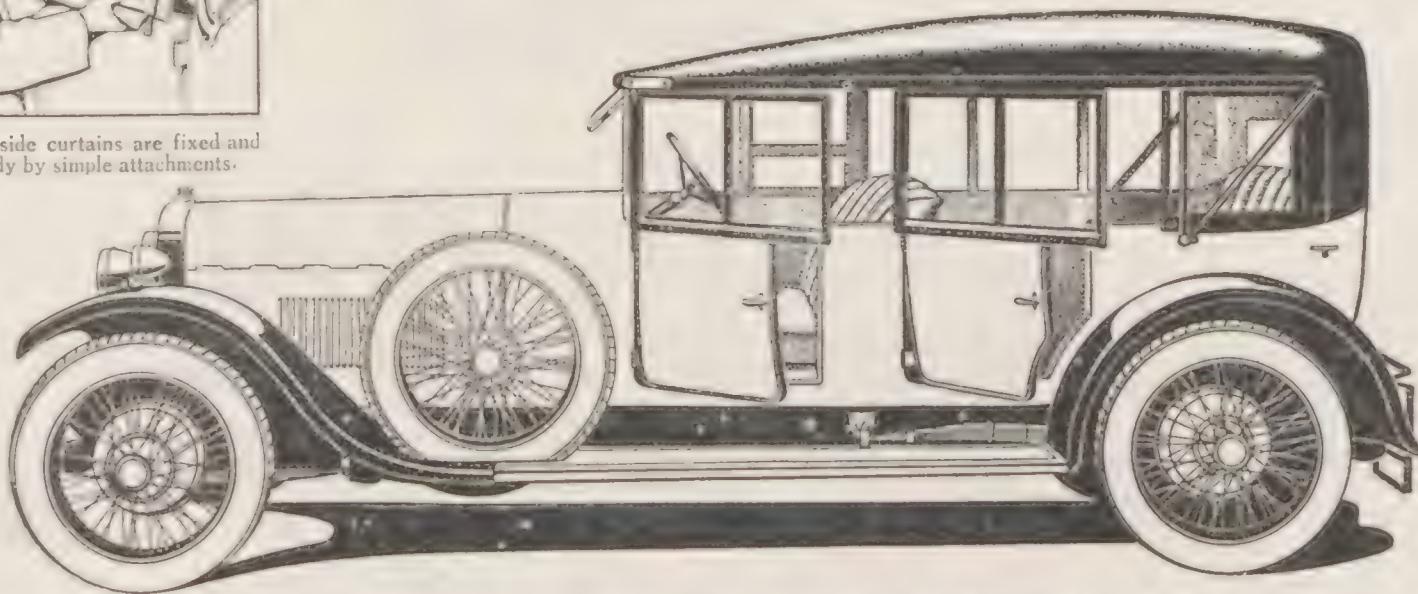
THE SUPREME **SUNBEAM**

The 20/60 h.p. six-cylinder Sunbeam with open touring body ensures the fullest measure of comfort all-the-year-round.

The deep, well-upholstered seats provide ample accommodation for five occupants. When protection against rain or cold is needed, the all-weather equipment can be brought into use immediately. The hood and curtains overlap so that all draught is excluded, and, in a few moments, the open car becomes perfectly enclosed.

Complete with the Sunbeam four-wheel braking system (comprising six brakes in all) and all equipment, including hood and side-curtains described above, the price of the five-seater open touring model is £950. There has never been better value offered in any other high-class car—British or Foreign.

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20/60 h.p. Six-cylinder Sunbeam Open Touring Car with Hood and Side Curtains in position.

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**National Benzole
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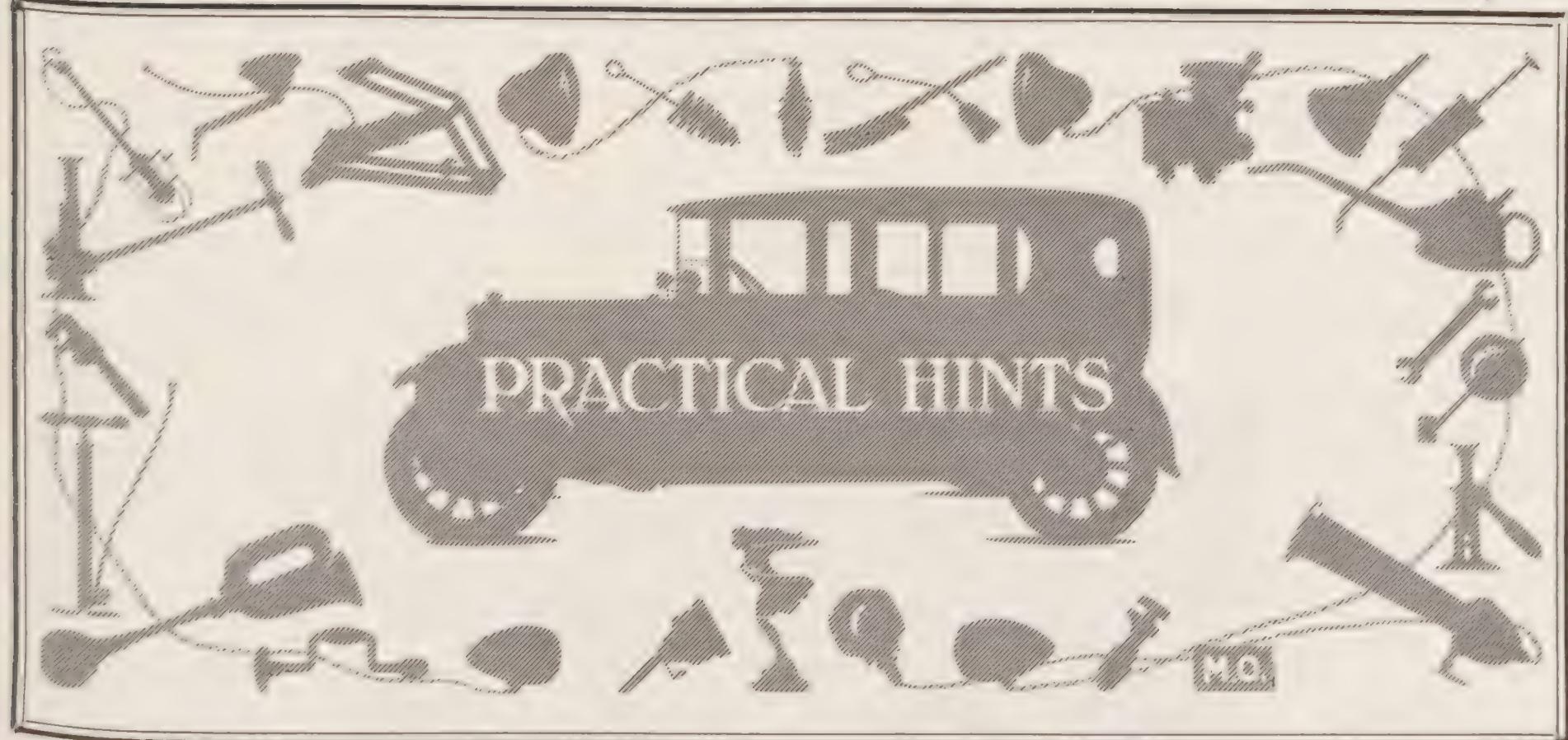
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More Hints on Cold Engines.

IN the November issue we dealt with the subject of starting a cold engine, and offered a few suggestions for remedial measures.

We gather from our post-bag that these have proved useful, so seize the opportunity to supplement them with a further batch. This time we will deal in detail with the magneto, plugs and carburettor, taking them in the order named.

It must be remembered that a very slight defect in the even facing of the platinum points of the make-and-break mechanism may mean the difference between a good spark at slow engine speed, and the need for its quick turning to obtain any spark at all. It will be seen, therefore, that those facings must be true in themselves, and the gap of the "break" must also be set accurately.

In the case of a car fitted with coil ignition, a similar accuracy is necessary, although, admittedly, it is not so vital.

It frequently happens that an old car, which has given no cause for complaint as regards easy starting during summer, develops bad qualities in this respect when it has to face the cold and damp of winter. Its fall from grace is caused by the partial demagnetisation of the magnets, which are peculiarly susceptible to bad atmospheric conditions. The only possible remedy is to have them re-magnetised.

If a lack of spark is particularly pronounced on a damp morning, you will probably find that the rocker of the make-and-break is sticking on its pin.

Now for the plugs; they, also, are

an important factor in easy starting. With continual use of the car the gap between the plug points gets slowly and minutely wider. Given good plugs, this process takes a long time, but sooner or later the increased width of the gap leads to greater difficulty in starting up; and the trouble is more marked in damp weather.

The remedy is to remove the plug, and to press the outside electrode closer by gently tapping it with the back of a heavy penknife, or light screwdriver. The width of the gap should be just sufficient to permit of an ordinary visiting card being slipped between the points.

So we come to our last item, the carburettor. See that it is properly adjusted. After a time the butterfly valve becomes loose, with the result that too much air is admitted to the induction pipe. Then, of course, you get the mixture too thin for easy starting.

It is quite simple to re-set the adjustment which is provided. Let a warm engine "tick round," and then unscrew the adjusting set screw until the engine is running as slowly as possible. Now give the adjusting screw half a turn to the right, hold that position carefully while you tighten up the lock nut, and, *hey presto*, the job is done!

Cutting Across Dangers.

We propose to give a few hints about the "Rule of the Road," making particular reference to the much vexed question of "cutting across" overtaken traffic.

This common driving fault most distinctly needs ventilation, but it is

by no means confined only to car drivers; quite a number of motor and push cyclists are also addicted to the practice. However, we need not stress that point. We can deal with it irrespective of the type of vehicle.

In overtaking any species of road traffic, it is obvious that the oncoming vehicle must take up a position nearer to the right of the road than the traffic unit being overtaken. And we cannot help thinking that it is the consciousness of being on the wrong side of the road, and the consequent anxiety to regain correct position, which causes much of the "cutting across" that becomes cause for complaint.

This brings us to the necessity for a better understanding of the "Rule of the Road," both in its legal and good-road-behaviour aspects.

The first thing to realise in connection with this matter is that failure to keep to the left is only an offence when meeting approaching traffic. The second is to correct a misapprehension concerning what is really meant by the left of the road. What it really means is not the extreme left, but the "left of the centre." And the third is that in all legal cases the "Rule of the Road" is accepted as one of convenience and general safety interests, rather than as a hide-bound regulation.

From these remarks it will be gathered that there is no legal or moral obligation to hurry back to the left of a clear road after overtaking other traffic. On the contrary, *if the road is clear*, it is your duty to stay on the right until you are at a perfectly safe distance.

Indeed, on an open road, you are

A FEW PRACTICAL HINTS.

legally correct in keeping to the right until approaching traffic appears. But in most cases it would be silly and dangerous to exercise that right.

When to Toot.

Whilst we are on the subject of driving, we may as well deal with another question of road manners. The one alluded to is the practice of sounding the horn too late. Owners of fast cars draw abreast of slower ones, before giving the customary warning.

This is the proper course for the driver of the faster car to pursue. He should first sound the horn at the maximum distance behind the traffic he is overtaking at which it is likely to be heard.

Then he should wait for an indication that the warning has been noted. This will usually be shown by the vehicle ahead moving slightly to the left. As an additional precaution, just before coming abreast a further, but quieter, toot of the horn should be given as a final warning of the intention to pass.

There is another point which necessitates comment. We refer to drivers of slow-moving traffic who keep to the centre of the road, to the detriment of normal-speed traffic wanting to pass.

Here again we have an instance where the strictly legal right should give place to the claims of courtesy. Unquestionably there is a moral obligation upon the driver of the slow

vehicle on a busy road to make way for a faster one.

Climbing Hills of Snow.

At the moment of writing the weather is spring-like, but, as some weather prophet has said, "A green Christmas leads to a white January." If the prophecy matures, winter motorists will be wrestling with snow-clad hills, by the time this appears in print, and a few hints as to negotiating them will become at least seasonable.

Well, the essential for climbing a hill covered with three or four inches of snow is summed up in a very few words. To gain success you must keep on the move. "He that hesitates is lost." The essence of the contract—as the lawyers put it—is never-ceasing action.

You will find that you must keep these maxims in mind even on gentle slopes such as 1 in 15, which you can climb readily on top gear. Once you stop, say, to verify a reading of the gradient, you will find great difficulty in "getting away from rest." Indeed, in the majority of cases, it will prove impossible without the special help we shall detail later.

You will find that however gently you let the clutch in on low gear, the rear wheels will simply compress the snow in their efforts to get a grip. They will spin round, and make the patch between them as slippery as ice.

As a general rule, it is only one rear wheel which will spin round, the differential gear acting on the other

will keep it stationary. But in a few seconds the snow will become so slippery under the wheel that you could leave the engine ticking round with the low gear engaged, and get out to have a look at the calmly spinning wheel!

Well, if you reach that stage, there are two things you can do. The obvious one is to reverse back to the bottom of the hill and start afresh on the level. You will then climb the hill comfortably on any gear, always provided you keep going steadily with just the necessary amount of power from the engine. Don't accelerate on a low gear, or you may possibly lose enough way to cause a stoppage. Also it is liable to produce a peculiar type of slither-sideways skid.

By the way, in coming down, remember that you must perform the operation steadily, using the engine as a brake. Keep the car under control all the time. Once it gets a little out of hand there will be the very deuce to pay before you get control again.

Now for the less obvious expedient to get going again from a stoppage. Place a piece of sacking, or something of a kindred nature, under the spinning wheel to ensure its getting a grip for the first few feet, and up you will go with colours flying, so to speak. It is a good idea to tie the piece of sacking by a piece of string to the rear dumb iron. Then the improvised gripping agent will also climb the hill, once the car is started.

**DON'T DRIVE DANGEROUSLY.**

Do you realise that at a speed of 25 miles per hour, in a second one has travelled a little over 36 feet?—or 9 feet in a quarter of a second. Our photograph was taken at $\frac{1}{100}$ th of a second's exposure, and clearly shows movement. Thus, in an emergency, the minutest fraction of a second may mean—disaster or escape.

THE MAN WHO TOOK THE WRONG TURNING.



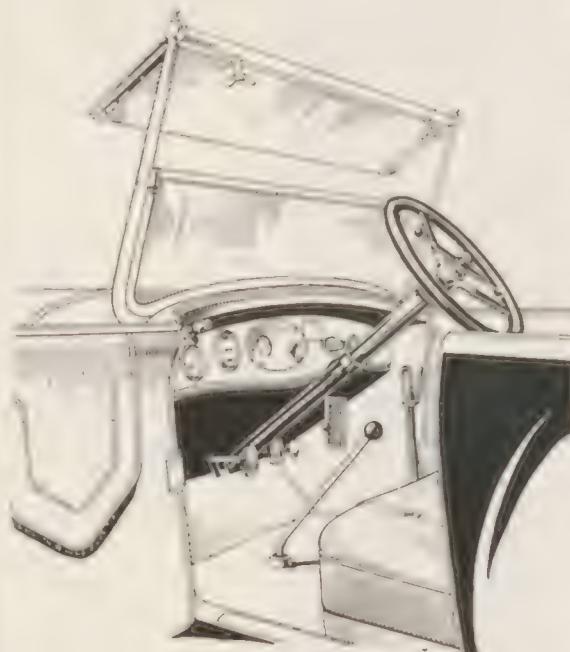
"Frederick, I have an intuition that we've taken
the wrong short cut."

THE 6-CYL. 12/30 H.P. TALBOT—OF SOUND DESIGN & EFFICIENT PERFORMANCE.

The hood and all-weather side-curtain equipment of this model are of very efficient designs. Note the method of carrying



the side curtains when not in use—behind the back squab of the car seats—and the neat hood cover and luggage grid.

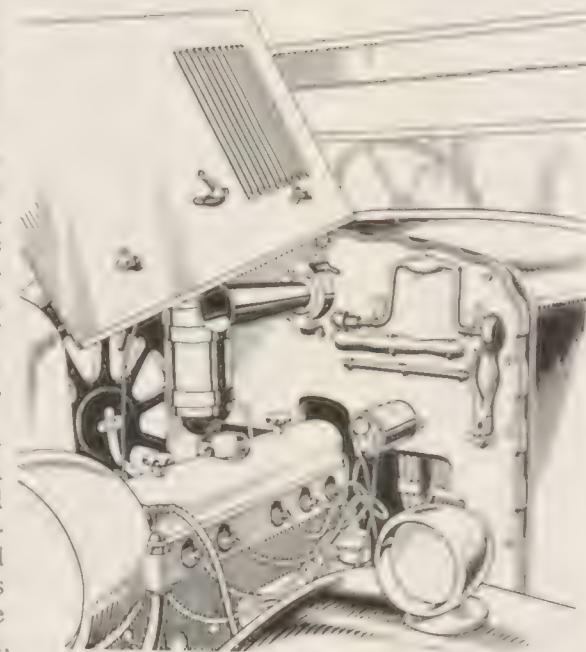


You will agree that the arrangement of the instrument board is unusually neat; and this can also be said of the general design of the driving compartment.

NOTWITHSTANDING the fact that one has learned to expect performance of an unusually high degree from Talbot products, one's expectations of the 12/30 h.p. six-cylinder Talbot; taking our experience with this Talbot model as a criterion, are more than justified—and considerably so! The design of engine—Mr. Louis Coatalen's own—is based upon the soundest principles possible, proved so to be by the excellent results obtained; the materials used in the construction thereof, again proved by durability figures and facts, are of the highest quality; while the workmanship, upon which we are truly in a position to comment, having closely inspected the modern production methods, the plant, and Talbot's skilful personnel, is by far in advance of the average.

The outstanding features of the overhead valve six-cylinder power unit, rated at 13.9 h.p., are:—(1) quick and powerful acceleration; (2) pronounced silent running; and (3) its compactness and general accessibility. Furthermore, starting is equally simple in all seasons, while the carburettor may be flooded from the dash, the aluminium inlet pipe being of special design, hot water jacketed. Lubrication is pressure fed to all the main points, and efficient cooling is always assured. Steering is of the irreversible worm and nut type; and the springing, semi-elliptic front and cantilever at rear, gives delightful suspension.

A speed of from less than 5 up to 60 miles per hour we ourselves obtained on top gear; and the fuel consumption for the run—322 miles, including many at high speeds—was approximately 24 m.p.g.; while that of oil and water was insignificant. Thus, again, our Talbot expectations were more than justified.



To eliminate unnecessary disturbance of passengers, the more frequently used tools—brace, pliers, plug spanner and tommy bar, jack and handle—are housed "right there."

Further tools, spares, and other impedimenta may be carried in a strongly constructed locker beneath the rear passenger seats



—as illustrated. The upholstery, as can be seen, is deep and well sprung, giving a maximum degree of comfort.

THE SIX-CYLINDER TALBOT AT WOOLPIT, NEAR IPSWICH.



We placed the 12/30 h.p. Talbot by the old house, because they are both sturdy and of proved efficiency. The mill suggested another simile. This pleasant car is swift as the wind which moves the sails.

THE CARE OF THE CAR.

By Ronald Cann.

The Importance of Correct Lubrication.

LUBRICATION is of the very greatest importance to all the moving parts of a car. Movement itself does not require it, but when two surfaces slide against one another there is an imperative need for it. For instance, though the actual rod of a connecting rod moves up, down, and sideways, it requires no lubrication whatever; but at each end of the rod there are surfaces which twist and turn against other surfaces, the little end twisting to and fro over the gudgeon pin which keeps the piston in position, and the big-end turning round and round the crankpin. Both of these require a constant supply of oil.

The purpose of lubrication is to provide a film of oil between all moving surfaces, so that friction is reduced. Theoretically this film is almost immeasurably thin, and completely separates the two surfaces, so that no wear is possible. In practice, however, this is not the case, as even the most polished surface appears something like a ploughed field under the microscope. The tiny inequalities of the two opposed metals are bound to abrade each other in time, despite the oil film, though the extent and rapidity of the wear is naturally affected by the supply and nature of the lubricant.

Given perfect lubrication and perfectly true bearing surfaces, the metals used would not matter in the least, for they would never touch. Since it is impossible to arrive at this ideal state of affairs, the next best thing is to make one of the surfaces of some soft and easily renewed metal, so that wear takes place mainly on the soft metal. Crankshaft and bigend bearings are therefore usually made of white metal framed in brass. The hard steel crankshaft turns within these, and being largely composed of lead, the white metal accommodates itself very closely to the shape of the shaft.

This accommodation is what is really meant by "running in." During the running in process the engine is lightly worked with an excess of lubricant. This results in very accurately fitting "journals," as the parts turning in the bearing are called, so that the oil film really has a chance to prevent the two surfaces from touching.

Another advantage of the use of white metal is that its melting point is comparatively low, so that should the lubrication fail, the heat generated by the friction of the two surfaces melts out the white metal without damaging anything

else. Where bearings are made of hard metal, such as phosphor bronze, a lubrication failure may result in a temperature so high that the steel journal and phosphor bronze bearing are almost fused together. The repairs called for in the latter case are naturally more expensive than with a "run" white metal bearing, which can easily be replaced.

Since the easy running of an engine is affected so greatly by the lubrication and nature of the bearings, designers have naturally turned their attention to ball and roller bearings for the crankshaft and big ends. The chief difficulty with these is constructional. No one has yet succeeded in making an efficient type of split ball bearing, so that at present the cranks have either to be threaded through the bearings and then bolted together to form a rigid shaft, or else the bearing cages have to be large enough to be slipped round the bends in the crankshaft. Both these methods are expensive in labour and material, and though very efficient for racing purposes, the bearing area is so small that rather a harsh engine results.

The most usual lubricating arrangements are a combination of "splash" and "forced" lubrication. Splash lubrication occurs in an engine which gets its oil by making the bigends dip below the surface of the oil in the sump, many designs being fitted with spade-like dippers for this purpose. At the speed at which an engine turns the splashing so caused is enough to form quite a thick mist, or oil fog, in the crankcase, and the faster the engine runs the thicker the fog becomes. The little ends of the connecting rods as well as the cylinder walls are lubricated by the fog; as the splash from each big end occurs when its piston is almost at its lowest point, where it remains for a relatively long time while the crank carries the connecting rod from the down to the up stroke position, this method of lubrication is more efficient than appears at first sight.

Forced lubrication is carried out by means of a small oil pump situated in the sump, which forces oil to all the engine bearings through special piping. It is becoming increasingly common to drill an oilway right through the crankshaft, along which oil is forced under pressure to each bearing, and sometimes up a pipe beside the connecting rod to the little end bearing also. The oil feeds into a small well with oilways leading from it cut in the metal of the bearing, and

the turning of the shaft draws the oil all over the surface of the bearing. The oil squeezed out at the sides drops off into the sump, whence it is once more drawn up by the pump, and so used again and again.

The quality of the oil used is naturally of great importance, some deteriorating rapidly from the heat of the engine, while others are unaffected by it. Nearly all the makers' handbooks advise the owner to change the oil in the sump every one or two thousand miles. Though it may appear wasteful there is a sound reason for this. With the air taken into the cylinders from the carburetter is mixed a certain amount of fine dust and road grit. Some of this gets on to the piston crown—where it forms the basis of carbon deposits—and the cylinder walls, and does not leave the cylinder with the exhaust gas. In time quite a lot of grit has worked its way through to the sump, where it mixes with the oil and is dispatched to the various bearings by the oil pump. Bearing wear is thus rapidly increased, as the film of oil between the surfaces is broken up by the grit, which also acts as an abrasive.

Petrol, either unburnt from the fuel, or from excessive priming, also finds its way into the oil, which it thins out, as well as lessening its lubricating qualities.

In cold weather a very light oil should be used, and there are many brands of almost water-like oils to choose from. In addition to its non-gumming, easy-starting properties, a thin oil reduces the friction in the working parts of the engine and frequently gives a few more m.p.h. Running temperature depends simply on the temperature at which the oil will flow easily, so that much time can be saved on cold mornings by using an oil which flows at almost any temperature. The use of a fairly heavy-bodied oil for the gear box and back axle, instead of the more usual and power-absorbing thick grease, gives a much sweeter running car, as well as being a more efficient method of lubrication.

Chassis lubrication is on the same principle as engine lubrication, but is not so immediately vital. Maintaining a film of oil or grease between the moving parts, such as shackles, brake connections, etc., is just as important as between the engine bearings if squeaks and rattles are to be avoided. Remember, lack of oil means wear, and wear always means, sooner or later, replacement.

A FRENCH TOWN OF BEAUTY AND CHARM.



A street in Montreuil-sur-Mer (with a Napier touring car in the foreground), an ancient town in Picardy, which has many associations with French history. It is built on a hill, and was formerly fortified. The lofty walls which surround it date from the Middle Ages, and the citadel built by Hugh Capet in the 13th century still survives. The reconstructed ramparts are planted with magnificent elms, and form a beautiful promenade. A wonderful view is obtainable from them, including the heights of Maresquel, with Etaples and the sea in the distance. The town, apart from its own charms and its beautiful surroundings, is of great interest to Britons. It was here that in 1657 the French King reviewed 3,000 of Cromwell's Ironsides, who had come over to co-operate with the French in the war against Spain. Here, too, the Irish Legion in the service of France was disbanded after Waterloo. And in 1915 Montreuil was the headquarters of Field-Marshal Sir Douglas Haig, who resided at the Chateau f Beaumerie, one mile east of the town. The Salle du Conseil contains a "Christ," attributed to Van Dyck. In a chapel on the right of the hospital there is Rubens' wonderful painting "The Descent from the Cross."



"I hold it an indisputable maxim that he who has only seen one race of people, instead of knowing men, merely knows the people with whom he has lived."—ROUSSEAU.



THE DISTINCTION BETWEEN "MISFEASANCE" AND "NONFEASANCE."

THE MOTORIST AND THE HIGHWAY AUTHORITIES.

By W. Eric Jackson, LL.B., Barrister-at-Law.

There is an extraordinary lack of endeavour among the road authorities of this country to make the roads fit the motor traffic of to-day. In the assumed interest of the ratepayers roads are permitted to fall into an appalling state of disrepair, new roads are made up only after long delays, and when repairs are executed they seldom are efficient enough to last any length of time.

THE unfortunate part of the whole question is that prejudice on the part of the road authorities can take its stand behind Acts of Parliament and the rules of law. Under the old law of this country a municipal corporation was an impersonal, invisible sort of body, and was assumed in law to be unable to possess ordinary feelings and intentions. Consequently a corporation, not being a human being, could not be guilty.

This rule has been curtailed somewhat in later years, and corporations can be sued in many ways, just as individuals, for criminal and negligent acts. But a remnant of the old law remains. A highway authority can be sued if it does something wrong; but it cannot be attacked at law if it does simply nothing, even though such inaction amounts to what would be negligence in the case of an individual.

For instance, an occupier of a house, or the owner of a garage, is bound to see that his premises do not become, by disrepair or otherwise, a nuisance or danger to the general public. So, if a slate falls off a roof on to a passer-by, or if in the approach to a motor house there happens to be a hole where the approach crosses the public footway, and a member of the public stumbles through this, the occupier of the house or garage, as the case may be, is liable; for he is bound to maintain the property in a safe condition.

But if a highway authority, which is bound to maintain the roads within its district, allows a road to fall into disrepair, so that it is full of holes and ruts, and a danger to all traffic, the road authority is not liable if anyone driving on the road is injured through the bad state of the road. Such inaction on the part of the authority is a "nonfeasance," or a "doing nothing," and it is not responsible in law.

A highway authority can, however, be held liable for what it does, if it does anything wrongly. In legal language it is liable for "misfeasance," or misdoing. So if a road authority

digs a hole in the road and carelessly leaves it unguarded, the authority can be sued by anyone who is injured.

So, where a highway authority removed a fence which had been put up along a road to protect the public from falling into a dangerous ditch, the authority were held liable in damages to a man who, driving along the road, drove into the ditch and was injured. The action of the authority in removing the fence was a misfeasance. If the fence had never been there, and the accident had happened, the authority would have escaped responsibility; for the accident would then have arisen from not putting up a fence, or nonfeasance.

So, where heaps of stones are left unlighted at the roadside the road authority will be liable for putting the heap there without warning, that being misfeasance.

The distinction between misfeasance and nonfeasance leads sometimes to curious results. A local municipality has control frequently of sewerage as well as the roads. Consequently as sewerage authority it has the right to put down manholes in the road. If this is negligently or improperly done the municipality can be sued by anyone who happens to be injured thereby. If the manholes are properly put down the authority cannot become liable.

Suppose now, that the road wears down around the manhole cover so that the cover forms a dangerous projection above the surface of the road. The authority in this case are not responsible; for the danger has arisen not by any negligent *act* on their part but through *inaction* in not maintaining the road-level.

Of course, if the municipality in renewing the surface of the road, omitted to make the road level with the top of the manhole, such omission would amount to doing their work improperly, and consequently a misfeasance. A recent example was given of this in a case against the Finsbury Borough Council. The Council were authorised by Act of

Parliament to undertake the street lighting in their area. They accordingly set up lamps in various parts, but in one street there was a dangerous archway. The nearest lamp set up by the Council was no less than 70 feet away from this arch, as a consequence of which the arch was inadequately lighted. The driver of a van, in attempting to pass under the arch, was killed. It was held by the Court of Appeal that the Council had negligently done what it was authorised to do, i.e., it had committed a misfeasance in lighting the borough.

A still more recent case (1922) in the High Court complicates the matter a little more. Workmen employed by a highway authority spread layers of new macadam over a road under repair. Part of the stones were rolled down to the level of the rest of the road, but a considerable stretch was not rolled in, and the layer of stones was several inches above the normal road level—in itself not dangerous.

The workmen, however, knew that numbers of heavy motor coaches were likely to pass that way, and during the night about 20 charabancs passed over the road and churned up the new layer of stones into a very dangerous condition for other traffic. A taxi coming along shortly after skidded and overturned through the dangerous state of the road. The road authority were held liable because they had put upon the road something which in the circumstances their men knew would become a danger. This was a misfeasance, even though the work as left by the men was not dangerous until the intervention of some outside agency—the coaches.

Motorists may think this state of the law a little out of accord with the need of the times, when to modern traffic disrepair may be as serious as misrepair. The old-fashioned remedy of getting the Attorney-General to prosecute the inhabitants at large is too cumbersome and uncertain to protect the interests of motorists against the lethargy of local corporations.



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VIBRATIONLESS ENGINES DO NOT, AS YET, EXIST.

THE ELIMINATION OF VIBRATION.

By Wilfred Gordon Aston.

Wonders of Past Progress—and Possibilities of the Future.

ONE of the essentials of the high-class modern motor car is that the mechanism shall not in any way obtrude itself upon the attention of the passengers. For this reason it must be reasonably silent; but what is perhaps of even greater importance, it must be capable of setting up in the vehicle generally no vibration that is likely to cause discomfort. Theoretically, on the assumption of perfect material and perfect workmanship, it would be possible to make an engine and a transmission system which, both wholly and in detail, were so perfectly balanced that the occupants of a car could not tell whether the motor was working or not. Practically, such a thing is also possible, for although it is a difficult question to secure mathematical accuracy in machines' parts, it is fortunately a fact that below a certain point the *corpus vile* of the passenger cannot detect any vibration at all, and providing that the engine can be brought to an appropriate standard its departure from theoretically perfect balance is of no consequence.

Already we have cars which may be described as embodying vibrationless engines, though I have yet to meet one in which this statement would hold good over the whole of the scale of engine revolutions. On the other hand, it must be conceded that of late years important strides have been made in balancing in a better degree the ordinary sort of four-cylinder engine which, from the mathematical point of view, is definitely of the unbalanced type. This improvement has been brought about by the use of light alloys for such principal moving parts as the piston and connecting rod. The four-cylinder engine would be quite perfectly balanced if these parts weighed nothing at all, hence the lighter they are made the less the degree of vibration set up. In the case of the four-cylinder we get vibration at the stage in which it is definitely perceptible, and indeed cannot be disguised, but

at the same time is not unpleasant in the better type of car. Six-cylinder vibration is still less perceptible, and consequently such an engine is more pleasant to ride behind than a four.

Generally speaking, it can be said that if, in a mechanism, its working does not involve any movement of the centre of gravity of the whole, this mechanism will be balanced and vibrationless. If we have a single-cylinder engine, the fact that the piston is moving up and down the cylinder means inevitably that the centre of gravity of the whole engine is also caused to move up and down. One force can always be balanced by another force equal in strength and opposite in direction, hence the primary objection of this type of engine can be removed by adding another cylinder in which another piston works to counteract the influence of the first. In the horizontally opposed twin this idea is well materialised, and it is undoubtedly the best of all two-cylinder engines, since firing comes at equal intervals, and the major sources of vibration cease to exist.

In the four-cylinder engine we have two pistons descending in the cylinder whilst the other two pistons are ascending, and it might therefore be supposed that conditions of complete balance are established. This, however, is not the case, for although the pistons weigh the same and travel the same distance, they are not always travelling at the same speed. At certain points of the stroke the downward moving pistons travel much slower than the upward moving ones, with the result that in these circumstances the centre of gravity of the whole set of pistons does not remain, as we want it to do, in a fixed position, but also moves up and down. This fact is due to what is called the "angularity of the connecting rods," and the shorter these are made the worse the effect becomes. In the six-cylinder engine, and also in the "straight eight," the influence of the unequal movement of the pistons is effectively washed out,

so that these engines are, in theory, perfectly balanced.

There are, however, other sources of vibration which still exist. In the first place there is vibration due to crank-shaft torsion. The crank-shaft, when of considerable length, has a definite amount of spring in it, and if one end were fixed and the other end carried a fly-wheel the latter could be partially twisted round and would then oscillate at a regular speed. The crank-shaft thus has a natural period. When the speed of the engine is such that the impulses that the pistons impart to the crank-shaft come at a rate which corresponds to this period, then a very heavy torsion will be applied to the shaft, which will prevent the pistons from taking up their theoretical positions in the cylinders. In these circumstances their respective movements will not cancel one another out. Instead, there will be a movement of the centre of gravity of the reciprocating parts, and perceptible vibration will occur. This vibration exists to a certain extent in all multi-cylinder engines, and is generally met by the fitting of a special damper at the front end of the crank-shaft.

Another source of vibration is due to the fact that for perfect balance it is necessary for each explosion to be of the same magnitude. As we all know, weak firing or misfiring in one cylinder is accompanied by a very perceptible change in the "feel" of the engine. Now it is an extremely difficult thing to ensure that at all speeds the gas from the carburetter is distributed absolutely uniformly to all the cylinders in turn. This is why most engines tick over with a slight jerkiness, which instantly disappears as soon as the throttle is opened a little more. In the old method of making an engine, with the cylinder head and cylinder itself all in one piece, it was extremely difficult to ensure that all the combustion chambers held the same volume of gas. One of the reasons why the modern engine is relatively so vibrationless is

THE ELIMINATION OF VIBRATION.

because, with a detachable head, the surface of the combustion chamber can be machined all over so that each cylinder is given exactly the same volume, within the limits of manufacture.

I might also mention than an equally difficult problem arises with reference to pistons, crank-shafts, etc. The former could not work at all if they were a dead accurate fit in their cylinders; the latter could not revolve if it were a dead accurate fit in its bearings. A space has in each case to be left for lubrication, and the presence of this permits a certain latitude of movement which results in vibration.

Again, although every effort is made to give the valves an absolutely equal opening, it is technically impossible to get absolute uniformity in these details, and this again will lead to vibration which is possibly perceptible. The valves themselves have to be operated by tappets which do not rotate, but which reciprocate, and are therefore capable of disturbing the balance of the engine in exactly the same way, though to a much smaller degree. Even in a six-cylinder engine the movements of the tappets do not balance one another owing to the fact that the contour of the exhaust cam is different from that of the inlet cam. Just as the crank-shaft is susceptible

to torsional vibration, so, in its own way, is the cam-shaft liable to the same trouble, and at certain speeds this will vibrate at its natural period.

Again, it is necessary to have some sort of drive for the cam-shaft. If a chain is used, any slackness in that chain will be liable to cause vibration, whilst if gears are employed the same trouble is equally difficult to eliminate. The characteristic "hum" of gears is ample proof of their being commonly in a vibrating condition.

So far as rotating parts are concerned, such, for instance, as the fly-wheel, it is not only necessary for this to be truly circular and to be mounted absolutely centrally on its shaft, but it must be balanced in every direction—that is to say, the distribution of weight in the metal must be absolutely uniform. Supposing we had a fly-wheel with a shallow hole bored in its rim adjacent to, say, the front edge. The fly-wheel could then be statically balanced by boring a similar hole at the opposite end of a diameter anywhere on the rim, but if then the fly-wheel were rotated at a high speed it would be found that it was not balanced at all. To get this condition a second hole would have to be bored, not only opposite to the first, but at exactly the same distance from

the front edge of the rim. In most motor manufactoryes special machinery is used to enable the true balancing of fly-wheels to be carried out expeditiously. In the case of the connecting rods, these are partially rotating and partially reciprocating parts, and it is therefore of the utmost importance that they should all be of exactly equal weight; and not only so, but the distribution of this weight must be uniform. Two connecting rods might weigh the same, but they would not balance each other unless, when put on scales, the little end of one weighed the same as that of the other, and the big ends were likewise equal.

No attempt has been made in this brief note to deal exhaustively with the subject of vibration, but sufficient has been said to indicate what a very big subject it is, and to suggest that, although a reasonable perfection of freedom from vibration can be obtained in a very carefully made engine, it is almost unthinkable to have one with no vibration at all. As I have mentioned, however, vibrations of a very small amplitude cannot be detected by the human body, and it is therefore quite probable that at no very distant date we may have plenty of engines whose lack of balance can only be detected by instruments.



"When daisies and violets blue
And lady smocks, all silver white,
And cuckoo-buds, of yellow hue,
Do paint the meadows with delight."—Shakespeare.

"LAUGH WITH A VAST AND INEXTINGUISHABLE LAUGHTER."—SHELLEY



Something roomy in the way of a car.



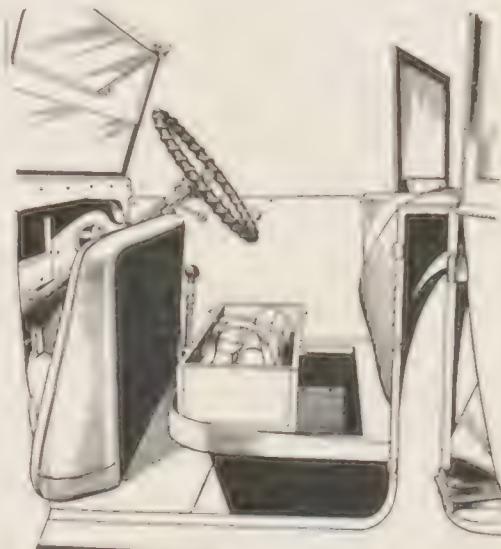
"Hey! You blighter! Why don't you look where you're going?"

THE 14 H.P. STANDARD—BUILT TO LAST!

With the various instruments—clock, speedometer, ammeter, switches—placed each side and below a large parcels recess, the dashboard is of novel design. With-



out taking a hand from the steering wheel, the electric horn may be sounded by an outward movement of the arm—the operating button is on the side of the body.



Tools are carried in a specially constructed detachable container situated beneath the driving seat. Our sketch shows the seat removed and the container lifted from its recess.

SITTING at the wheel of the 14 h.p. Standard five-seater touring model, we were impressed with three markedly good features—firstly, the pronounced sturdiness generally, either in regard to the power unit, the chassis or body construction; secondly, the unusually high degree of driving or passenger comfort, ample room and excellent upholstery; and, lastly—what motorists know them not?—its pleasing lines. It is a car soundly built, and built to last! Moreover, it is undeniably one of, if not the, most popular cars on the market.

With a bore and stroke of 75 mm. by 110 mm., the four-cylinder engine is highly flexible and powerful. Brockley Hill introduced us to this fact, which, with two passengers and luggage, it devoured "on top"; crossing the summit at approximately 20 m.p.h.

The "third" gear gives excellent acceleration; the clutch is light but reliable; and the suspension (semi-elliptic springs at front, underslung at rear) ensures comfortable riding at all speeds. Is it speedy? Well, we attained 50 m.p.h., and there was more in reserve.

Brakes, on the other hand, fitted to the rear wheels only, with a transmission brake operated by the hand lever, do all that is necessary efficiently.

In conclusion, we feel that the name "Standard" is what it should be. For this reason, a standard bearer is usually the leader in procession, and the Standard car owner is the happy possessor of a car which is a leader of its class.



Normally a footrest, this locker houses the tyre pump and other accessories or spares. Note the neat and well-fitting side curtains and the generous body dimensions.

The all-weather equipment when not required may be dismantled and neatly packed in a



spacious compartment behind the back squab of the rear seats. The body upholstery is very good.

THE 14 H.P. STANDARD CAR IN HERTFORDSHIRE.

THERE is something very charming about old thatched cottages ; they have an appeal straight to the heart, a sort of happy, homely peacefulness. And in the features of the 14 h.p. Standard car these latter remarks also apply. Moreover, the lines of this popular family car are appealing to the heart of the motorist.



Our photographs show the 14 h.p. Standard 5-seater touring car ; top, near Anstey, Hertfordshire ; and, below—flood or no flood, it will run "swimmingly."

MOTORING WITH EVE.

No. 12. — *From King's Lynn to Holbeach, Sleaford and Lincoln.*

We consort with History and Legend.

EVE stood on a wharf at King's Lynn with the house of one of the old merchant-adventurers as a background, and invited me to dip into the past.

She pictured the days when freight was not easily come by, and strong arms, stout hearts, and good weapons were the bill of lading a ship must carry. The days when, having got your cargo, you had to face not only the orthodox perils of seafaring, common to all ages, but also the risks of pirates. It might even be that a little piracy on your own account came into your calculations, only in that event you called it privateering, and although, strictly speaking, you were supposed to confine operations to enemy craft, well, mistakes would happen, so an occasional vessel belonging to a neutral would go to the bed of the ocean, and its rich cargo find its way to King's Lynn quay. Anyway, putting it on the mildest footing, if you would be a merchant adventurer, your vessel would have to do its own policing of the ocean under ordinary conditions, and, in times of war, become a fighting unit of the King's, or Queen's, navy.

And King's Lynn, by reason of its geographical position, has often had an enemy at its sea door, the mouth of the River Ouse two miles away.

Eve declared that there is more old-world romance to the square inch of this Norfolk town than there is to the square mile of many others. As evidence of the assertion she sent an Elizabethan King's Lynn ship to the Spanish Main; carried it through a multitude of adventures, and brought it back safely loaded with costly merchandise, mostly looted, I'm sorry to say. She reunited its officers and crew to their joyful wives

and sweethearts on the quay, and discharged them rejoicing to their homes in the picturesque town, past the beautiful South Gates which formed part of the old walls.

Then Eve jumped to Cromwellian days, and the great-grandsons of those Elizabethan heroes were sailing forth to do battle with the Dutch.

These excursions of my fair companion into the past induced a spirit of emulation in me. I started to take a hand in the fascinating game, carrying it back still farther, to the coming of the Franciscans; those friends of the poor and miserable, who shared their poverty; and counted their lives well spent if they could bring a ray of hope to the down-trodden and oppressed. Of the monastery they built at Lynn only the tall steeple remains. One likes to think of it as a symbol of their good work.

The title of Lynn was not always preceded by King's. Indeed up to the time of Henry VIII. it was Bishop's Lynn, so called because a Bishop of Norwich had built a Priory there. The Tudor King abolished the title at the same time as he seized the church property.

The Guildhall with its beautiful Gothic window really dates from 1422, although 1642 is carved over its entrance.

The Custom House, once an Exchange, was built in 1683. It is a beautiful building. The wonderfully-carved faces which are a feature of its architecture, sent Eve into rhapsodies, in which I joined as chorus. Truth to tell, if I had not been firm, I really believe we should have spent the rest of our lives in Lynn. But the car waited, and the road called us onward.

The highway we took was over ground followed by a monarch and his army something over 700 years before. We were more fortunate than King John in having a bridge to cross the River Nene. He had to ford Cross Keys Wash, and miscalculating the power and time of the tide, lost baggage, money chests, and even his crown in the sea. Indeed he narrowly escaped with his life, and, as a matter of fact, died a few months later at Newark, partly from the effects of the immersion.

Three and a half miles farther on we ran through Long Sutton, which to tell truth is a town which does not err on the side of beauty, if one excepts its fine Norman church.

We pursued our way to Fleet Hargate, where we turned to the left for Holbeach.

This town also has a very beautiful church. Indeed the locality abounds in magnificent specimens of ecclesiastical architecture. But in addition, Holbeach also possesses a legend of a somewhat gruesome nature.

I retailed it to Eve as we left the town and bore to the right for Fosdyke. The country through which we were running formed a



The riverside and South Gates, King's Lynn.

"FABLE IS THE ELDER SISTER OF HISTORY."

fitting setting for the eerie narrative. It was marsh land, and long clouds of mist rose from the dampness, wreathing themselves into fantastic shapes on either side, although the road itself was clear.

The legend concerns four cronies of Holbeach whose habit it was to assemble at the town hostelry for the purpose of playing whist. Sad to relate Death laid its hand upon the best player, and the disconsolate trio who remained missed him sorely. All the zest had gone out of the game.

Their grief apparently led them to partake freely of the tavern's excellent liquor, with lamentable results. In a semi-drunken frenzy they were seized with the perfectly horrible idea of playing a game, with the dead man as "dummy."

They made their way to the place of interment, and removing their late partner's body from its tomb, propped it up against the church wall, and dealt out the cards.

The legend gives morbid, and extremely intimate, details of the course the game took. I spared Eve these particulars, and came to the end of the story, when, for the benefit of whist players, it may be mentioned that the games stood eight to nine, with the odd game against "dummy" and his partner. The living partner frantically put the query "can you one" to "dummy," but received no answer. Then the ground quivered beneath the players' feet; three demons sprang from the nether regions; each seized his victim, and the impious citizens vanished from the earth for ever.

My fair companion nestled down into the fur collar of her travelling coat, and shivered deliciously.

"Do the ghosts of those wretched gamblers still haunt the scenes of their misdeeds?" she asked, indicating the wraith-like forms in the mist.

"The legend indicated absolute finality so far as earth was concerned," I assured her.

"Thank goodness Bridge and not Whist is the game of the moment!" she exclaimed.

We pursued our way by Fosdyke, Sutterton, Swineshead, and Heckington, to Sleaford, passing from Marshland to Fenland in the course of the run.

At Sleaford there is a great meeting of roads. We took the one which leads through Holdingham and Leasingham, and so on to Lincoln. For the greater part of this section the road runs through Heathland, a pleasant change from the watery country through which we had hitherto passed.

On a lonely heath some 6 miles from Lincoln we passed a pillar about 100 feet high which once performed the function of a beacon. It was erected 123 years ago as a guide to wayfarers lost during the rigours of winter. There are records of dead travellers buried in the snowdrifts which form on this flat land. In those days the heath was roadless, and the ancient tracks across it soon became obliterated.

With the arrival of better methods of travelling the lamp on the pillar lost, to a great extent, its value; so in 1810 it was abolished, and a statue of George III. substituted.

And so we came to Lincoln, the city of many beautiful antiquities, two of which, at least, are unique in England; the city which was already a town when the Romans came to Britain; the city in whose lovely cathedral kings have been crowned; the city in which parliaments have sat to decide the destinies of our country.

Eve and I spent days in wandering about and searching out its wonders. We took the car under its Newport Arch, where Roman chariots once rolled, and through which the traffic of the city has since continued to pass. There is no other Roman gate in England where this happens. We

passed across the High Bridge which constitutes the second unique feature of Lincoln. For here you can scarcely see the River Witham, which it spans, for the houses in between. They are built right across each side of it, as was the custom with old-time bridges. But the others have passed away, so far as this country is concerned, leaving Lincoln's representative to carry on the old tradition.

We made our way to what remains of the fine old castle William the Conqueror built, and dreamed of the doughty warrior beneath its great Norman gateway. The castle was erected in 1068, just after William had consummated his victory in the West of England, by besieging and taking Exeter.

He had turned northward against Eadwine and Morkere, who were still fighting in the vain hope of preserving the Saxon dynasty.

But the fame of the remorseless conquest of the West preceded William, and the Saxons were frightened into submission. It was then that Lincoln Castle was built. It is now the County Prison!

We passed up the High Street and saw the Jew's House, another relic of Norman architecture, which is said to have sheltered a Jew who murdered a Christian lad in revenge for the persecutions to which his compatriots were subjected! The victim was a choir boy, and his body was eventually found in a well near by. The unfortunate lad was buried in the choir of the Cathedral, and a shrine erected over him. The Jew was executed.

Much of our time was spent amongst the wonders of Lincoln's lovely Cathedral, set on the hill overlooking the city. In some respects it is one of the most beautiful in the world—so beautiful that my poor pen refuses to attempt its description.

Eve argues that the coat of modesty ill becomes the shoulders of a professed scribe. If this is so, I can only regret that my mental tailor is such a bad workman. I can at least do my duty so far as advising the reader to see for himself the chief gem in Lincoln's crown.



The Norman building known as the Jew's House, Lincoln.

HER SHELL-LIKE EAR TURNED PINK TO THINK THE *BÈTE-NOIRE* BENZ WAS BEAT.

MODERN ANCESTRY.

A BALLAD OF BLUE BLOOD AND ANTI-PINK PETROL.

By Fred Gillett.

The Lady Berengaria Plantagenet d'Élite
Was sweet as she was twenty, but as sad as she was sweet.
She had all gadgets gold can buy or noble birth attain,
And yet her noble eyes shed tears, like rainbow-tinted rain.
The Norman arches of her brows sagged, as though fain to stoop
To conquer rank's discrepancies at one fell, wistful swoop.
She had a Stern Cold Guardian, and he had placed a ban
On Lady Berengaria's choice which leaned towards a man
Whose ancestors had not come over with the crowd selective
When William Duke of Normandy made Hastings his objective.

* * *

The Lady Berengaria was from heels to highbrow fond
Of Reginald Saint-Leonards, but, alas ! when Reggie conned
His pedigree, he found that he could only trace his rank
To Tudor times and thence a tin-Elizabethan blank.
Not so Sir Thomas Diehard, whose precursors were no chicks
And for their coats of arms endorsed A.D. 1066.
Regarding Reggie's lineage as comparatively commoner,
The Stern Cold Guardian frowned and thrust the Diehard's hope,
Sir Tom, on her.

* * *

"There's only one thing for it," Reggie said. "That's Gretna Green.
On Boxing Eve, from Staines will start my Holdall limousine,
Upholstered in blue pégamoid with fittings silver gilt.
"Wilt fly with me, Fair Lady ?" The Fair Lady said, "I Wilt !"
Reggie said, "Dexter Sarculum !" (Prae-Norman for "What ho !")
"We'll start as though for Exeter—to Gretna Green we'll go."

* * *

Needless to say, Sir Diehard had suspicions of their flight ;
His Araratic Norman nose had smelt a rat that night.
He swore to nip it in the bud. Said he, "They shan't elope.
This Exeter's a blind, for Reggie's filled his tank with dope !"
"Ha !" said the Stern Cold Guardian. "We'll beard them in their dens.
Hie thee to Brooklands Motordrome and borrow Barlow's Benz !
We'll follow them and foil them ere they reach the blacksmith's forge
At Gretna Green, and then and there forbid the banns, by George !"

* * *

Clandestinely young Reginald, the Guardian to hoodwink,
His doped Holdall had entered (as a cycle-car I think)
For London-Exeter's road-jaunt ; and so on Boxing Eve
He and his Berengaria might have been seen to leave
The official route at Egham and debouch for Gretna Green.

The Guardian and Sir Diehard in the Benz might have been seen
Also to make a side-slip in pursuit. The pace was hot.
Eliminating heat, they raced towards the famous spot.

* * *

The Benz burst all its Potsdam tyres. Flames from its port-holes burst.
Said Reggie, "While there's dope there's hope that we shall get there first."
In spite of dopes of telluride it proved a konking ordeal.
He cheered his bride with amorous words—"Napoo ! Vive l'ong-tong cordial !"
And whispered, too, sweet Norman nothings, such as "Rien suite !"
Her shell-like ear turned pink to think the *bête-noire* Benz was beat.
The special licence was produced, the wedding cake and ring,
The bridesmaids from the dickey-seat, the rice and everything pertaining to a wedding, and the "Also Present" list
For the next day's Court Circular—then Eden's serpent hissed,
For Sir Diehard and the S.C.G. drove up and cried, "Desist !"

* * *

Sad were the lovers' pinking hearts. "I haven't felt so bad,"
Said Reggie, "since that famous day—the day my dear old Dad
Gave me my first rich petrol taste upon the Thousand-Mile R.A.C. Trial, thousands of years—at least a good long while Ago, the first year of the present epoch, 1900."
The Stern Cold Guardian beamed. Sir Diehard saw that he had blundered
In thinking that 1066 blue blood would count as Pre-war
Compared to 1900 brand of petrol, old as De-war.

* * *

The Guardian grasped young Reggie's hand. "Take her, my boy, she's yours !"
'Tis not always by centuries that noble blood matures.
Kind hearts are more than simple party funds, says someone—Tennyson
Perhaps—Well, anyhow accept a Stern Cold Guardian's benison !"

* * *

And, I might add, the Herald's College found Sir Diehard's claims
To Norman blood were founded on coincidence of names.
His ancestors' bairns' fathers' blood was underproof pot-still.
That he came over with a worthy Conqueror I will
Admit, because from Normandy he travelled with "Old Bill."

(Note.—The *juice d'esprit* of this ballad was inspired by these words, quoted from *The Motor* :—"To-day a man proves his early lineage in motor history by averring that he took part in the Thousand-mile Trial, just as another man proudly claims an ancestor who crossed with William the Conqueror.")



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INDOOR GOWNS AND OUTDOOR SPORTS ATTIRE.

MATTERS OF FEMININE MOMENT.

*The time has come, the modiste said,
To think of many things,
Like shops and sales and coming modes
And dress that flares or clings.*

SALES undoubtedly tend to become earlier each season, and there is no breathing time at all for most of us between the exhaustive family Christmas house party and the morning—so frequently a Monday—when we gaze at a favourite sale catalogue which begins “to-day” and realise that not a moment is to be lost. Some women have a genius for sales, or a special guardian angel is in attendance on their quests. They seem able to discard all the usual advice about not buying what they do not require merely because it is cheap, and yet their odd lengths of material invariably seem adaptable, and if the worst comes to the worst these emerge triumphantly as covers for the loose cushions in the car.

Among the useful remnants are lengths suitable for tunics and house-coats, and the choice of materials fashionable for these is almost without limit: velvets, chiffon brocaded georgette, metal tissue, or kasha, to say nothing of many embroidered woollen fabrics. But it is not in the direction of remnants that the pitfalls lie, but rather in a lack of discernment of the general trend of fashions. At the sales this season there will be any number of the straight, tubular coats, both in plain and checked materials, but emphatically these have had their day, and a better investment is the coat with the flare at the hem, and a slightly cut-in back.

Corded silk, on the other hand, is coming into favour as a material for coats, and is particularly happy allied to skunk fur. It has the great virtue of lightness to recommend it for walking in preference to an all fur coat, while for a girl on a dress allowance these corded silk coats can easily be made to fill the rôles of day and evening wear.

Directoire styles are gaining in popularity, and a very becoming hat of this persuasion was of hatter's

plush, high in the crown with straight sides and a small turned down brim, very slightly bowed. The trimming was of wine and silver swathed flatly and threaded through a large square silver buckle. *Incroyable* cravats in linen and lawn frills will probably be seen in the very early spring, and we are also promised the wide cloth collars to spring coats—all becoming with these Directoire hats and well suited to English types of beauty. Whether the gradual changes already noticeable will write a speedy obituary for shingled hair is doubtful, but the Parisienne is already wearing a shingled coiffure by day and adding long hair for a more elaborate dressing in the evening. The compromise has much to recommend it, but also very obvious drawbacks.

We hear also a good deal at the moment of the Parisienne's latest whim for dispensing with make-up, and returning to the “holiday” complexion. Becoming though this may be at the seaside, on the moors, or for winter sports, it is scarcely likely to find universal favour in city life, and one suspects that this alleged revolution is nothing more than the return to a more subtle and less obvious camouflage than has become customary of recent years. If this is so, the change is all in the right direction, for there is immense charm in illusion.

With the coldest weather ahead of us a valuable acquisition at the sales is Shetland underwear, which has improved so wonderfully in design and is as dainty as silken garments for those whose constitution necessitates the wearing of wool. It is sometimes alleged that Shetland undies are very extravagant on account of their tendency to shrink, but a great help in avoiding this is to pin the garments well stretched out on a floor or table when wet, when they will keep their pleasant filminess for a considerable

period. To hang them up or dry them by a fire is to court trouble.

Silk undies of the moment are getting more and more brilliant in colouring, and perroquet shades in washing satins and brochés are among the most coveted bargains to be sought at the sales. Lace, on these garments, is conspicuous by its absence, and little sprays of flowers or ribbon embroidery are worked sparingly as decoration, rather taking the place of last season's craze for monograms.

For the devotee of winter sports each season brings a wider and more attractive yet practical selection in outfits. For skating, short leather coats in gay colours will be allied to sombre skirts, while those who do not go in for sports seriously will find much to interest them in Russian boots, Cossack caps and high, tight collars. For the sports girl who goes in for the strenuous pursuits of ski-ing and bobbing, the latest ideas are along Rosalind lines, and one of the prettiest models was of a warm russet green for the coat, cap and scarf, with brown breeches and puttees. The coat was rather shorter than trench coat length, but fitted with big pockets on the hip, and buttons to fasten close at the wrists. The whipcord breeches were cut to fit snugly at the knee.

There are also some fascinating short coats made of a silk carpet cloth, with Persian patterns; they seem rather unexpectedly trimmed with leather, but at the moment leather can do no wrong, and even for sports wear stamped and stitched leather belts and bags are being worn. Chamois is also being used to line long coats, as a substitute for fur, and it has the advantage of less bulk as well as being lighter in weight. For the Riviera white kid coats will be worn and, allied to heavy crepe de chine skirts pleated in panels or at the side, with one of the new stencilled jumpers make a practical and becoming tennis outfit.

THE FARE OF MOTORING FASHION.



Lady Robert Innes-Ker (Miss José Collins) in her Reville creations for private wear:—(1), a gorgeous evening cloak of apple green velvet, embroidered in jewelled bands, and collared and flounced with chinchillas; and (2), in her own words “there is nothing she loves quite so much as her new chinchilla motor cloak.”

MOTORING FASHION FOR THE FAIR.



[Photos. by Thos. Fall.

Here are four delightfully attractive hats, creations featured by Mlle. Germaine, of Zyrot & Cie:—(1), a pinky-fawn crepe roman turban with feather tufts to match; (2), black velvet turn-up hat with long black ostrich feather; (3), of brown velvet with pheasant mounts; and (4), a charming hat of black velvet with paradise feathers.

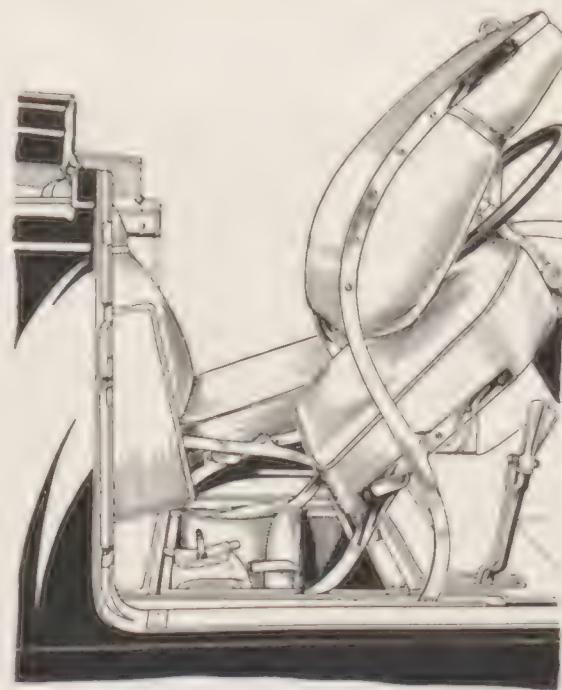
THE 12/28 H.P. DE DION SPORTSMAN'S COUPÉ—A UNIQUE VEHICLE.

WHAT would be an ideal sportsman's car? With such a car numerous vital points need careful consideration. In the first place, it must be a reliable, fairly fast, and powerful vehicle; serviceable in all seasons, with ample accommodation for one's sporting colleagues (as many as three in the case of a "foursome") and, more important still, for one's sports "clobber." This item should receive a special study, for one's "rig out and tackle" should not merely be laid down—to be sat and trod upon, as is the case so often. It needs *exclusive* attention. And yet, on the other hand, the sportsman's car, in spite of his many bewildering desires, must not, on any account, familiarise the charabanc. A difficult specification, to be sure; but such a car exists—it is the 12/28 h.p. De Dion Sportsman's Coupé.

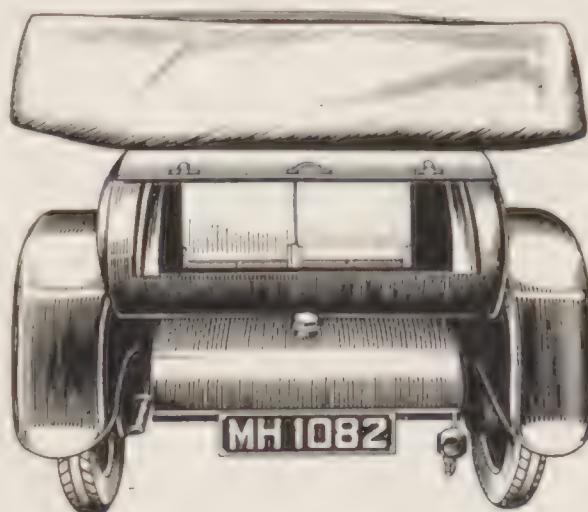
We had this model on trial quite recently, and it truly thrilled us—it is so full of unusually excellent features. The seating, for instance, is quite a novelty. It is more than that, in fact; it is of remarkably efficient design. Front seats are independent, adjustable, and of the folding type, while there are two occasional seats (upon which the heaviest passenger may sit without fear of crumpling up, a fact which cannot be said of many cars so fitted), and these, when not required, fold away into special spring loaded recesses in the side of the bodywork, the space they occupy when in use then being available for luggage.



Illustrating the unique—and, incidentally, very efficient—seating design. Both front seats are independent, adjustable to four positions for leg room, and of foldable type. Note the conveniently placed brake and gear-change levers.



Tools and spares are carried in a deep and spacious locker beneath the driving seat—quickly to hand without disturbing passengers.



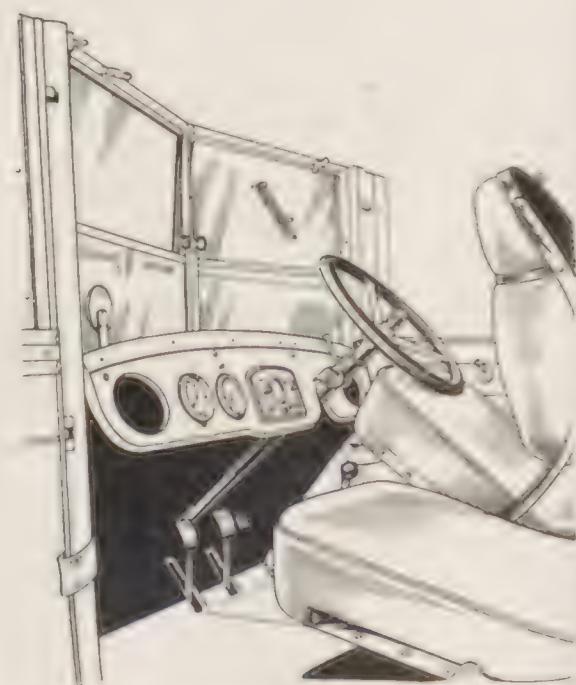
Depicting the simple method of loading one's sports equipment—in the special luggage compartment at the rear of the car. The backs of the two front seats are clearly visible.

There is the special luggage compartment (referred to above), however, and this takes the place of the conventional dickey seat; while luggage loading is simplicity itself, as emphasised in the accompanying sketch. Other praiseworthy features of this novel body are the very wide doors, permitting easy access to all seats; the special rubber insulators upon which the carriage is mounted, the dash being cushioned in the same manner, giving freedom from road shocks; and the desirable De Dion practice of allowing clients to choose their own seating arrangements; to select

their own colour schemes; also the choice of a wide standard range of cloth or leather to be used in trimming. And above all, body fittings are made to clients' personal measurements to ensure the acme of riding comfort. Thus, in a few words, De Dion automobile bodies represent the motor coachbuilder's art to a very advanced degree.

For those interested technically—and few motorists are not nowadays—one or two words on the main features of the engine and chassis might be desirable. Rated at 12.1 h.p. (tax £13) the four-cylinder engine, with overhead valves, automatic lubrication and water pump cooling, develops more than ample power for all normal demands; is silent in running, and is of clean and accessible design. Steering, of the worm and worm wheel type on ball bearings, is light and reliable; the brakes on all four wheels act swiftly but sweetly; while gear-changing—a really excellent feature—hides no terrors even for the absolute novice; and lastly, the suspension system (with semi-elliptic springs at front, and cantilever at rear) is delightful.

In the matter of performance, it is economical, fast, a good hill-climber, light on all its controls, and its "pick-up" on top is very comforting. It truly has all the desirable "sporting" qualities, but in addition it is no freak body, but possesses a pronounced air of dignity and grace, so compatible with the special wishes of the motoring sportsman,



This gives a more detailed view of the excellent seating; the well-fitted instrument board; the doubly-adjustable "V" type windscreen, with windscreen cleaner; and the generous width of the doors, allowing free and easy access.

THE 12/28 H.P. DE DION SPORTSMAN'S COUPÉ AT BRAUGHING.



Braughing, in Hertfordshire, is a delightful old village with only 950 inhabitants, and is mentioned in the Domesday Book. This fact makes our picture all the more suitable since the origin of the De Dion car dates back to the earliest days of automobile construction. Inset is a view of the car's pleasing lines from the front.

FROM THE BAY OF BISCAY TO THE GULF OF LYONS.

Part I—Biarritz to St. Gaudens.

By Clive Holland.

A Sunshine Tour in Winter, Southward of the Garonne.

EARLY more motorists seek sunshine on the Continent during the months when, in England and especially in London, one can hope for little more than transient gleams of sunshine between long periods of dull and gloomy weather. Biarritz has become one of the most pleasant and fashionable resorts in that southwestern corner of France which is so picturesque, and is almost, indeed, a "suntrap." From Biarritz, too, there are many motoring tours which can be made to old towns, through delightful country and wonderful scenery.

One of the best of these is from Biarritz, on the Bay of Biscay, to Narbonne, on the Gulf of Lyons, with a return journey from Carcassonne, that wonderful dream city, bearing westward to Toulouse, Moissac, Agen, Marmande, and then southward by way of Houeillès, Mont de Marsan to Dax, and back to Biarritz.

Once a very small fishing village, and half a century ago with a population of about 3,000, Biarritz has now become a great seaside and winter resort with a population of upwards of 30,000, and a stream of visitors of the wealthier classes which yearly reach well over a million and a quarter. The fine Hotel du Palais, red and white in the sunshine, now stands where in 1855 the then Empress Eugénie built a villa, which act had the effect of starting Biarritz on its upward course to becoming a fashionable resort.

The popularity of Biarritz is easily understood. It is a delightfully situated town of moderate size, where the more objectionable features of Continental winter resorts have not been greatly developed; it has very beautiful mountain scenery in its immediate neighbourhood; and the coast is one of unusual beauty. Another recommendation, which will attract motorists and in fact all visitors in these days, is that, compared with many other much frequented winter places,

the charges even at the best hotels are very reasonable.

Few people can, indeed, be long in Biarritz, with its Atlantic surges and wonderful air, without deriving benefit. And the life in the hotels, on the tennis courts and golf links is very bright, cheerful and enjoyable.

On the walks and drives of the town in the winter and spring are seen many famous people, well known in London, Paris, Madrid and other great European cities, and on fine days the Perspective Miramar and its continuation, the Avenue du Bois du Boulogne, leading to the main road to the Spanish frontier, are thronged.

Less than five miles eastward of Biarritz is Bayonne, built on both sides of the Adour. The town chiefly makes an appeal to the visitor through its history, and this is particularly the case as regards English folk. It is the capital of the Basque country, and stands on a fine river with a magnificent mountainous country lying

to the south, which contrasts very sharply with the level wastes of Les Landes of the north, through which one has passed on one's journey to Biarritz.

It was a possession of England almost down to the Renaissance period, and was the centre of Wellington's victories in the wars of Napoleon, and therefore of great historical interest. At the close of the fourteenth century the mouth of the Adour became completely blocked up with a bank of sand and shingle, with the result that the river's course was diverted to the north so that it entered the sea ten miles from Bayonne. The town suffered greatly from this, and it was not until 1579 that an engineer-architect, Louis de Foix, assisted by a great tempest, succeeded in freeing the mouth of the river from its sand-banks.

Bayonne was lost to England in 1451. In 1814 it became the centre of the last phase of the Peninsular War, and Wellington's army, having crossed the Pyrenees and driven Marshal Soult from a strong position on the Nivelle, caused the French forces to retire to Bayonne, where they were again defeated by Sir Rowland Hill. The French, however, left a strong garrison in the city, which was held, although besieged by Sir John Hope, but capitulated after the abdication of Napoleon, on April 5th, 1814.

The old portion of the city has narrow streets and high buildings, among them the Château Vieux, a grim pile of the twelfth and fifteenth centuries, and the very interesting Cathedral begun in 1213, the chief portions of which were completed during the English occupation of the town, and upon the keystones and vaulting are still to be seen the arms of England. The latest part of the building is the west end; the beautiful crocketed spires of the two towers were only finished forty years ago. The thirteenth century cloister is of particular interest and should not be overlooked.



The Castle of Carcassonne, the foundations of whose walls the Romans laid in the fourth century. From the ramparts are magnificent views.

UNDER THE SHADOW OF THE PYRENEES.



BIARRITZ (centre) is one of the most delightful winter holiday resorts in France. It lies a few miles from the Spanish frontier, within sight of the Pyrenees. As a motoring centre it has many advantages, and when London is fogbound Biarritz is often bathed in sunshine. Our picture shows the Casino across the water. Lourdes (top left), set amid beautiful surroundings and almost under the shadow of the Pyrenees, is visited yearly by tens of thousands of pilgrims from all parts of Europe and lands across the seas. The beautiful church was built in 1876 above the grotto where Bernadette, a peasant girl, said she had seen and conversed with the Virgin. The old Cite of Carcassonne



(top right) is one of the most wonderful and complete Medieval survivals in Europe. It is a dream city, whose numerous towers and turrets, engirdling ramparts, and air of antiquity have inspired artists and poets from time immemorial. The town of Carcassonne, called the new, was founded in the thirteenth century.

The scenery of the route across France from the Bay of Biscay to the Gulf of Lyons is beautiful indeed. One passes through fertile valleys (bottom left) with tiny villages nestling at the foot of the mountain slopes. Some of the scenery is wildly beautiful and rugged (bottom right) with the road winding through woods, with distant vistas of mountain peaks breaking through the clouds.



THE BLUE-WHITE PEAKS OF THE PYRENEES.

The run from Bayonne to Pau (65 m.) is a pleasant one; there is a steep ascent out of Bayonne, and one leaves the entrance to the railway station on the left and travels by the undulating road, that bends to the right, for Orthez and Pau. One notices generally two features of the country between these two towns. The first, the fine and solitary umbrella pine trees dotted here and there, which have withstood many a winter storm; and the second, the fact that most of the country carts are drawn by bullocks.

One crosses the broad Adour by an iron bridge and reaches Peyrehorade (22 m.), the single narrow street of which little town is generally difficult to negotiate, especially on market days, owing to the crowds of bullock carts and peasantry; and, indeed, the wise motorist will do well to take the road which goes straight ahead at the bridge near where the grey towered castle stands high above the road. All the way to Orthez the road closely follows the river known as Gave de Pau, which follows the line of Marshal Soult's retreat from Bayonne. Puyôo (34 m.) is a picturesque and pleasant little place with steep-roofed houses, covered by rich brown tiles. Its name is supposed to have been derived from a patois word meaning a great mound crowned with a depression, which formed a stockaded fort in ancient times. The scenery improves as one goes along; and at Baigts, where there is a ruined twelfth century castle and sulphur baths, one gets very fine views of the Pyrenees.

Orthez (43 m.), the ancient capital of Bearn, is still a picturesque place with the river flowing rapidly over its rock-encumbered bed, and spanned by a fine fourteenth century fortified bridge, in the centre of which rises a tall tower and gateway containing a window through which it is said that the Huguenots, under Montgomery, forced priests to leap into the river. In the Rue Bourg Vieux there are some interesting old houses. The church is fifteenth century with a modern spire, but the Tour Moncade is the Keep of the ancient Castle built by Gaston VII. in 1242, and visited by Froissart, the Chronicler, in 1388.

On the right across the river the landscape, after leaving Orthez, becomes hilly and well wooded, and in the distance one has a delightful vista of the blue-white peaks of the Pyrenees, touched here and there with sunlight

falling upon snow. One noticeable feature is the change that gradually comes about of tiled roofs to slate, and high pitched roofs taking the place of the flatter ones in and near Bayonne. The road clings to the course of the Gave, and goes very straight over the flat land of the valley till one comes to Pau (65 m.), standing above the rushing river, and with views of a splendid chain of snow-clad mountain peaks. Most of the modern hotels are situated so that the windows and balconies of the principal rooms enjoy the great panorama of the Pyrenees with the Pic du Midi d'Ossau seen in the centre.

Pau is to-day one of the most popular inland resorts in France, with fine hotels, a genial climate, plenty of sunshine in winter, and much gaiety of the quieter type. There is a casino, golf links, tennis courts, polo ground, and even a pack of foxhounds!

Pau has a season all through the year, for the tourists come as soon as the winter visitors have flown, and there are the crowds which arrive yearly on their way to Lourdes.

The Chateau has a fourteenth century Keep of red brick, built by Gaston VII., surnamed Phœbus because of his great beauty. After entering the Courtyard through the open arches of the east side, one has on the left, overlooking the river, the beautiful façade restored by Henri d'Albret, Henry II. of Navarre. In the *Grand Salon*, known as the Chambre de Henri IV., was born the Protestant King on December 13th, 1553, and his cradle, in the shape of a large tortoise-shell, is still to be seen in the room. In this apartment were massacred, at a feast on August 22nd, 1569, ten Catholic noblemen, whose lives Montgomery had promised to spare.

In No. 5 Rue Bernadotte, on which there is an inscription, Bernadotte, Napoleon's general, whom he nominated as King of Sweden in 1810, was born. He was a lawyer's son, who ultimately became King Charles XIV. of Sweden in 1818.

One has a straight road on into Tarbes, undulating and with fine views of the Pyrenees to the southward, and many quaint wayside houses with thatched roofs. If one wishes to make a divergence to visit Lourdes, the great Roman Catholic place of pilgrimage, one should take the southward road at Soumoulou going through Pontacq.

The main road from Pau to Tarbes direct makes a zig-zag descent into

a wide green plain with level ground to the north, and the wonderful serrated range of the Pyrenees to the south. There is a small village of Ibos to the south of the road with a rather extraordinary looking fourteenth century church, distinguished by enormous buttresses, a high and narrow nave and two towers. One need not pause at Tarbes (88½ m.) for long. It is to-day a great horse-breeding centre carried on in a fertile plain in which also grow vines, maize and tobacco. The Cathedral has been described as "the most cumbrous and ungainly Minster in all France." On the door of the ancient Lycée is a curious Latin inscription, which reads "May this building last until the ant has drunk the waters of the ocean, and the tortoise made a tour of the globe."

As soon as one has left the Plain of Tarbes behind, near Barbazan-Debat, the hilly road affords one a wonderful succession of views of deep cut valleys, wooded ridges, and behind them the snowy Pyrenees. Our road lies, after passing the railway viaduct at Lhez, south-westward to Tournay (100 m.), then climbs for several miles in a beautifully wooded valley, and after one passes under a bridge one turns to the left across the railway, and then takes a sharp turn to the right running nearly due east. One now emerges on a stretch of road across a heathery moorland, on which in summer there is a blaze of golden gorse, commanding magnificent views in all directions, reaching the little town of Lannemezin (110½ m.), with an old church dating from the twelfth century and possessing a remarkably fine Romanesque doorway. Sixteen kilometres takes one soon to Montrejeau (120½ m.), a small and pleasant town, with red-roofed houses, brightly painted shutters, arched streets and an Hotel de Ville dating from the sixteenth century, with the Market Place beneath. The situation of the town, the principal church of which has a fine octagonal belfry, once the Keep of the Castle, is on a hill above the Garonne. After a steep drop out of the town one has a straight and level road, following the course of the river, leading to St. Gaudens (137 m.), a small town with a fine Romanesque church, the capitals and carved choir stalls of which should be noted. The church was formerly fortified, and the upper portion of the Romanesque Tower was rebuilt by Laffolye. The carvings of the door were badly mutilated by the Huguenots.

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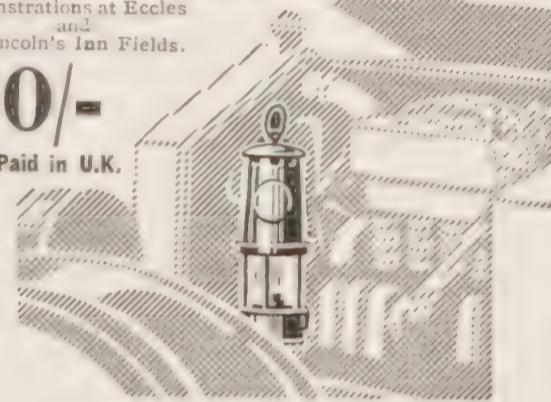
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By James G. McQuade.

Editor, "The Motor Weekly," South Africa.

SOUTH AFRICA is an "all the year round" motoring country. It has only two strongly marked seasons—the wet season and the dry season—and, by the providential dispensation of Mother Nature, when it is the wet season in the eastern part of the country it is dry in the west. Or, to be more precise, the rainfall is heaviest in the Western Cape Province during the winter, which lasts from about May to August, while in the eastern and northern portions of the Union the climate is dry, crisp and clear. In the hot summer, which lasts from about November till February, heavy, cooling rains fall in the eastern and more sub-tropical portions of the Union, while it is bright, dry and warm in the western and southern Cape. All the year the sun shines, and the raw, grey, dull days of the northern hemisphere are exceptional. Except during December and January in the Northern Transvaal, Rhodesia, and along the coast belt of Natal towards equatorial Africa, the climate generally is mild and genial—delightfully warm in the day, fragrantly cool at night, a temperate zone which all white people find seductive after the rigours of a European or American winter.

In the face of these facts it has always been an abiding mystery to those of us who dwell permanently in this smiling land of sunlight why the globe-trotting motorist consents every year to undergo the trials and tribulations of a trip along the conventional paths of continental Europe as far as the overrated Mediterranean coast, when with infinitely less trouble, and very little extra cost—if any, indeed, when the exactions of half-a-dozen Governments, Customs officers and "tipsters" are considered—he could sling his car from the wharf to the liner at New York, London or Southampton, and within 21 days, during which he will sail on sparkling seas of as deep a sapphire as any Mediterranean and under skies as cloudless, he can step off and unsling

his car at Capetown, Durban or Lourenco Marques. Here he will find himself in an entirely new world, more fascinating in the variety of its scenery, its peoples and its problems than anything Europe has to offer. I realise that it is just that bit of sea that proves often the deciding factor for or against the venture, but since the worst bit of it is the strip between New York and Liverpool, or Dover and Calais, and must be undertaken to get to the Continent, why jib at the longest and more pleasant voyage?

The English-speaking traveller to South Africa has no polyglot lingual problems to wrestle with on a holiday tour, no daily wrangles with officious frontier police and Customs authorities, no complicated triptyques to fill up, no heavy cash deposits to put down with the uneasy feeling amounting often to a dead certainty that he will never see the colour of his money again. The motor tourist who chooses to explore South Africa need merely book his own passage, advise his local automobile association, with whom the chief South African motoring organisations are affiliated, or in lieu of them, the excellent "Mr. Cook," of his intention. They will make arrangements with the shipping company by whose steamer he is travelling to ship the car—packing is not necessary—and give him letters of introduction. He steps on board, has a pleasant sea trip, and gets off on the quay at any of the South African ports mentioned, fills up with oil and fuel from the garage across the street, drives into town to the offices of the automobile club, gets all the particulars as to roads, routes and hotels for a tour covering any available time at his disposal, while in the meantime a courteous officer of the South African Railways or Customs, speaking the tourist's own tongue, will clear his baggage and have it ready to load on the car when the visitor is ready to take his place at the wheel for "a drive round Africa."

All this reads very simple, but the motor tourist who tries it will find it

just as simple as it reads. And this year more particularly—when the infinite variety of a world-wide commonwealth will have its life focussed and mirrored in the replica at Wembley—provides a unique opportunity for equipping oneself with all the sources of information that any man might require to fill his leisure days for the rest of his natural life.

There is not a point, a town, district or feature of the country referred to in this cursory glance at the motoring possibilities of the great sub-continent in the Southern Hemisphere on which profusely illustrated books and pamphlets giving the fullest details cannot be had free for the asking at the South African Pavilion during the Exhibition and afterwards at the office of the High Commissioner in Trafalgar Square.

I have referred to the motoring possibilities in so far as they are affected by climate. They are scarcely affected at all, except to enhance the pleasures of the open road. Motoring is possible and pleasant at any and all times of the year in South Africa, except for those who are in a violent hurry and want to cross un-bridged rivers after heavy rains and find themselves held up by a swollen drift. If they have wisdom they wait until the flood subsides, or take care not to get stranded at such a point in heavy rain, of which there is usually ample warning. But for a mere passing visit of from six weeks to six months there is enough novelty and attraction in motor touring in South Africa to satisfy the most insatiable appetite of the most experienced traveller for "fresh woods and pastures" without straying far from the beaten tracks of civilisation. Even the native life of the country, unspoiled by contact with the European, can be found and studied within a few hours' motor drive on easily negotiable roads from a hundred different points, from Port Elizabeth to the Transkeian native territories; from Durban into Zululand; from Kimberley into the Karoo and the Kalahari; from Salisbury and Bulawayo

SOUTH AFRICA—A HUGE TOURING PLAYGROUND FOR MOTORISTS.



SOUTH Africa to the touring motorist is just a huge playground, in which the beautiful scenery, the undulating countryside, and the various places of interest—and these are innumerable—form the motorist's playthings. Unlike the usual "toy," however, these are sources of unceasing enjoyment; and just as a child is delighted again and again at every angle of its plaything, so a fresh joy to the tourist is obtained with every mile of the countryside.

Our first picture depicts the glorious Marine Drive round Chapman's Peak, in the Cape Peninsula; looking on to where two oceans meet. Illustration No. 2 is of the fine road among the mountains of the Cape between Calitzdorp and Ladysmith.



In the centre, a party of motorists are seen crossing the Tugela River by punt, between Natal and Zululand. A fine bridge has been opened there recently, but many South African rivers have still to be crossed in this primitive way. However, the toll fees, as a general rule, are very small.

Below (left) is a typical drift. In the rainy season this brook becomes a raging torrent, but it subsides as quickly as it rises. Motor-cars negotiate these drifts without difficulty in normal seasons. Right: shows the old way and the new. The ox-waggon, which travels at about four miles an hour, is being rapidly displaced in South Africa by the motor car. The picture shows a typical Veld road after heavy rains.



LOOK ON THIS PENINSULA—AND LIVE!

wayo into Matabeleland ; from Bloemfontein into Basutoland ; from Johannesburg and Pretoria into the Northern Transvaal ; from Lourenco Marques into Mozambique, where the tribes of the Bantu race can be discovered in all their native—and naked—glory.

Much has been said and written about the roads of South Africa. Their atrocious character has been emphasised by five-minute observers. A general condemnation of this kind is a libel. The roads of South Africa are immeasurably better than were the roads of Great Britain at the same stage in her development. At their worst as good as the roads in extensive portions of the United States to-day, when she is the most highly motorised country in the world. That is to say, in the more settled parts of the sub-continent there are hundreds of miles of good metalled roads. It is no exaggeration to say that the macadamised roads of the Cape Peninsula are the equal of any in the world, and the Marine drive from Cape Town to Hout Bay, or the majestic sweep round Chapman's Peak, is unmatched by anything else for nobility and grandeur.

When the rhapsodist penned that immortal injunction to "see Naples and die," he had not seen Table Bay in the effulgent glow of a summer sunset, when the creeping shadows of the short African twilight arise from the sea, snuff the flaming orb and change the purple-tinted slopes of the Apostles into shell pink and deep saffron ere falls the velvet curtain of the night on a sky studded with myriad diamonds. See Naples and die, forsooth ! Look on this Peninsula and live. Volumes have been written about the scintillating sparkle of South African seas and skies ; the lonely majesty of its mountains, kloofs and krantzes ; but the half has not been told. No picture by human hands could catch its ever-changing moods nor portray the transcendent beauty of its colouring ; still less can words describe them. And the Cape is but the glorious gateway of a golden land. Within a radius of 100 miles of every one of the nine chief cities of the Union of South Africa there are well-made macadamised roads radiating into the vastness of the open veld, and then for hundreds of miles the main track from Cape Town, across which the pioneers of white civilisation have penetrated into the desert and the jungle, stretches as far north as Livingstone in the heart of Africa. Within the last few months, thanks to

the enterprise of the British Imperial Administration of the Sudanese East African and Uganda territories, inspired by the motorists of Kenya Colony, a way has been opened through the African continent to the head waters of the Nile that Stanley and Livingstone dreamt of. It is, in fact, now possible to travel by motor car from Cape Town through the Union, Rhodesia, the Belgian Congo and Uganda to the Sudan. A light little 12 h.p. English car, the Morris-Cowley, has in fact just completed the trip from over the new road from the Kenya Colony border to Mongala and back, a distance of 1,400 miles, in six days, or 22 hours running time forward and 35 hours back to Nairobi, and was the pioneer of a motor journey that in a few years' time will become as common as from Land's End to John o' Groats, or New York to Los Angeles. As yet, of course, there is nothing in the way of "comforts" or service on this distant transcontinental track, and the most northerly portion is not even open to traffic, but it is a symbol of the march of civilisation from Southern to Northern Africa, already pioneered by the aeroplane, a march which is fast depriving Africa of its cognomen of "the dark continent." Rhodes's dream of a railway from Cape Town to Cairo is in fact being anticipated by the petrol-driven motor car and the flying machine.

The globe-trotting motorist has nothing to fear from bad roads in the Union, and, as I have said, there is sufficient mileage of "made roads" within the haunts of civilisation to occupy the tourist for a full year before he can be said to have exhausted the interests of the country. The more adventurous traveller in search of hunting or big game with car and gun will, of course, go further afield, and will find a prolific source of sport and excitement in Zululand, the Northern Transvaal and Portuguese East Africa. This type of motorist does not expect European standards of roads and service and will naturally be content to rough it, and be prepared for "bad patches," but he will find them no worse than, say, the back blocks of the United States or Canada in the present day.

The same car, clothing and equipment that serve him in Europe or America will answer his purpose equally well in South Africa, except that during the summer in Natal, the Transvaal, Rhodesia and East Africa a helmet or topee is necessary to pro-

tect the head and neck from the fierce rays of the mid-day sun on the veld. The sub-continent as far north as Salisbury is well equipped for fuel, oil, accessory and equipment supplies, and on the whole the hotels outside the big cities are good, though not luxurious. Ninety per cent. of the cars in use are of American make from 18 to 22 h.p., and this is the type of vehicle best suited to South African country conditions, a point which British manufacturers are rapidly beginning to realise.

Though the closed car is gradually making its appearance in South African towns, the open touring model is the type best adapted for seeing South Africa by car. The one essential article of motoring equipment that South Africa does not possess is a series of good road maps like those published by Dunlop and Michelin in Great Britain. But it is a short-coming due to extreme youth and undeveloped nature of the country, and is being rapidly overtaken by the automobile clubs. Excellent road maps of the country as far as surveyed are published in a handsome volume by the Transvaal Automobile Club at 30s. Smaller route books of the areas in and around their jurisdiction are also published at a smaller charge by the Natal Automobile Club, Durban ; the Royal Automobile Club, Cape Town ; the Eastern and Midlands Automobile Club, Queenstown ; the Port Elizabeth and East London Clubs ; and by the Royal East African Automobile Club. It should be mentioned that motor taxation differs in the various provinces, particulars of which can be obtained on the spot, but usually a tourist bringing a car into the country is not called upon to pay Customs duty if he furnishes guarantees that he is taking the same vehicle back again within six months. He may remain in any Province for a period of one month without payment of the local taxation. A motor tourist, therefore, who is travelling through South Africa is not called upon to contribute anything to the road he uses, if his stay is limited to six months, or less than a month in any one Province.

A list of the chief motoring organisations in the various provinces, together with the names and addresses of the secretaries, all of whom are anxious to meet and greet visitors from overseas and to help them in any way possible, will be sent to prospective tourists on application.—EDITOR.

T H E M A C E S O F C L U N.

By Christopher Wenlock.

The return of the maces to Clun calls attention to a wonderful little village on the wild slopes of the great Forest of Clun, in south-western Shropshire, and at the same time awakens memories of old romance.

TO-DAY Clun is, in point of size and population, an insignificant little village with 700 inhabitants, though wonderful in its quaintness and peacefulness; but the day was when the parish of Clun covered the enormous area of one hundred and sixty square miles, and an old rhyme speaks of

"Clydach, Clyro and Clun,
Three largest parishes under the sun."

Clun once held the distinction of being a borough incorporate, governed by a Recorder, two bailiffs, and two sergeants-at-arms; but ninety years ago, in the year 1835, Clun ceased to be a borough, and the silver maces were retained by the last bailiff to hold that office. They have been carefully preserved by the Gwilliam family at the Pentre. One of them bears the arms of the Tudor sovereigns, and the other the arms of the Duke of Norfolk.

Now, through the efforts of the Earl of Powis, these maces have been returned to the town.

A narrow and awkward bridge spans the river at the foot of the hill on which the town stands, its walls being recessed to allow pedestrians to escape from damage by passing vehicles. It is said locally that "those who go over Clun Bridge come back sharper than they went." This results from the careful watch one must keep lest one meet a cart on the crossing. No doubt in these days of motors the sharpening effect will be considerably enhanced.

Just outside the town stands the imposing ruin of the keep, the most noteworthy remnant of Clun Castle. This castle is supposed to be the original of the "Castle

of Garde Doloureuse" in Sir Walter Scott's *Betrothed*, and, although the novelist's language may appear somewhat exaggerated, with the licence allowed to writers of fiction, the likeness will appeal to all who are acquainted with the castle and the prominent position it holds.

"The Castle of Garde Doloureuse upon the Marches of Wales was a place strong by nature and well fortified by art. It was one of those formidable castles on the frontier of the ancient British, on the ruins of which the traveller gazes with awe. The river, whose stream washed on three sides the base of the proud eminence on which the castle was situated, curved away from the fortress and its corresponding village on the west, and the hill sank downwards to an extensive plain so extremely level as to indicate its alluvial origin. An ancient bridge, a high and narrow combination of arches of unequal size, led to the opposite side of the river, and was about half a mile distant from the castle."

This famous castle was built soon after the conquest. It was stormed and burnt in 1195 and attacked by

King John twenty years later. Llewelyn failed to take it after a prolonged attempt, and the Welsh suffered defeat at a battle of Clun in the year 1263, in which doubtless the castle had its part to play.

The great tower was not built till 1272, and two hundred and fifty years later the buildings were reported to be in ruins.

It is claimed by some historians that, in the neighbourhood of Clun, Caractacus made his last valiant stand against the conquering Romans. There are, however, only scant suggestions of Roman occupation at Clun, although the great Watling Street comes within a few miles to the east.

Modern poets have slightly altered the lines above quoted to add to the allurement of this charming little village lying far remote from the restlessness of the busy world:—

"Clunbury, Clungunford, Clinton
and Clun
Are the quietest places under
the sun."

Rival villages, envious of the natural attractiveness of Clun and its neighbours, substitute such words as "wickedest" or "drunkenest" for "quietest," and ring the changes on the many words which fit the metre and answer the mood of the moment.

A glance at the map will show that west of Clun stretches for miles the great forest of Clun with the Black Mountain and Beacon Hill nearly two thousand feet in height. All this district is worthy of exploration. Its higher land is bleak and desolate, but its valleys and streamways are rich with sylvan charm and quiet peacefulness, where the scars of old wars have healing.



The old bridge and main street at Clun.

WHAT MOTORIST HASN'T A REGARD FOR HIS DASH?



This Smith's greyhound mascot makes a strong appeal to the sporting man and in every particular is a beautiful reproduction. Excellently hand chased, it can be obtained in solid bronze, gold or silver finish—£3 15s.



Supplied either in nickel or oxidised finish, with rounded ends, this ash tray (Smith's) is designed for fitting to fillets, being very shallow—£1 5s.



Smith's smoker's aid is in the form of a wireless cigar or cigarette lighter. When fitted—and simple instructions for fitting are supplied with every model—it is only necessary to press knob; the centre coil becomes red hot, and then the circular holder can be utilised by sliding upwards, when the lighter may then be handed round. One guinea (6 or 12 volts) is the price—Smith's.

A few Useful Accessories



You will agree that this chubby "Chilly Cupid" mascot is unusually attractive. Of solid silvered bronze, and of an exquisite matt finish, it is a suitable adornment for any make of car. At the price of 50s., it is sold by Frederick Pratt, of 66, Victoria Street, S.W.1.

THE owner of the above luxuriously fitted instrument board on a Bentley car is evidently a lover of "gadgets." It is fitted with almost every conceivable accessory serving a useful purpose. But what motorist hasn't a regard for his dash? Often one hears these remarks: "I wish I had an oil gauge here," "a petrol gauge there," "—a gradient meter there," etc. Why, motoring enthusiasm is responsible for almost as much as the depth of the motorist's pocket—and oftentimes more! However, don't let that deter you from considering the merits of the accessories illustrated. They are inexpensive, and form useful adjuncts to the car.



This Wesco spring cover, and the Allyne Zerk pressure feed oil gun supplied with it—quite an ingenious and useful equipment—received much notice at the Motor Exhibition last year.



Two further interesting and useful accessories (Smith's) are—above centre—a petrol tank gauge, 18s. 6d., clearly showing the contents of the tank at a glance: and below, a revolution indicator marked in hundreds of r.p.m.—priced at £7.

QUAINT, QUIET LEWES.

A Town with a Myriad of Interesting Associations.

LEWES—so quaint, quiet and romantic—what an interesting old town it is! And yet, of the hundreds of thousands who gather together every year at Brighton (about eight miles distant) how few, remarkably few, ever spare the thought—certainly never the time—of a visit to this old world spot. But why? It must be that the many attractions which Lewes offers, and its vast historical interest, cannot be generally known.

Apart from its beautiful and exclusive picturesqueness, which alone would repay a visit, it possesses a myriad of interesting associations and innumerable relics of bygone times. It is truly an ancient town of great interest and its early importance can be gathered from the fact that in Saxon times there were two mints here.

Built at the head of a tidal river, it frequently suffered at the hands of the Danes who came up with the tide, made a lightning marauding descent on anything available and convenient for removal, and went back to the open sea on the ebb tide, considerably richer for their visit.

The Castle Ruins, which are considerable, have two very fine gateways—the inner Norman one being part of the original building set up by William de Warenne in the eleventh century, and it is not surprising to read that the present Norman Castle (now in ruins) is the successor to a previous Saxon stronghold.

The outer gate, the Barbican, belongs to the time of Edward I, and makes a fine entrance to the Castle. In rooms above this gateway is housed a fine collection of flint arrow and spear heads, and various other contemporary relics, all of which have been found in the neighbourhood.

Beside these ancient weapons, there are two very old bicycles of the bone-shaker type. These seem incongruous in their ancient surroundings, but are worth more than a passing glance. They were heroes indeed who attempted to ride such clumsy monstrosities in the early 'seventies.

In Barbican House is a wonderful collection of interesting antiques, including many specimens of Sussex iron-work, for which the county was once famous.

Among other things to be seen is a very cleverly contrived piece of apparatus of Elizabethan days, devised for teaching a baby to walk, and in our present inventive age it could hardly be improved upon. The Museum in Barbican House is not open on Sundays, but the Castle fortunately is.

From the Keep a splendid view of the whole surrounding country is gained, and the very intelligent guide ably describes the various points of interest and gives one a very comprehensive idea of the extent of the old Castle.

Here on the green, among other curiosities, are the old Stocks and Whipping Post, somewhat weather-worn, and a vertical sundial from an adjacent rectory keeps time with one of the very uncommon globular ones. This latter, however, is shorn of its necessary equipments.

Here also are two very old British boats hollowed out of single tree-trunks, with an old wooden anchor found with one of them near Arundel.

Some very fine rubbings of brasses in Sussex churches are to be seen in the tower of the Keep and many of them are strikingly beautiful. The Surrey Archaeological Society has a museum in the building and some most wonderful and curious objects are housed therein—agricultural implements of bygone days hang on the walls, old crossbows, various traps for catching vermin and poachers (human and otherwise), manacles worn by women prisoners in Horsham Prison, fetters, and other cheerful relics of early Victorian prison life. Most interesting to present-day travellers is the old time-tables of the journeys between London and Brighton by the old stage-coach. Truly the journey was "a great adventure" then, and not a three-hour journey in those days.

Beside the Castle (from which it is difficult to get away) there is much in the town to call for attention and interest. In the High Street is a picturesque old dwelling-house called Anne of Cleves' house. Although it is doubtful if that lucky survivor of our Royal Bluebeard ever lived in the house named after her, the Manor of Southover, of which it forms a part, was contained in the grant Henry VIII made for her when he wished to rid himself of the lady.

The house is substantially built, and having been inhabited by folk with no superfluous wealth, has not suffered enlargements and so-called improvements, so that it is still practically in the same condition as when first built. It stands on the corner of a narrow thoroughfare called Potter's Lane, facing a fine old timbered house with overhanging storeys.

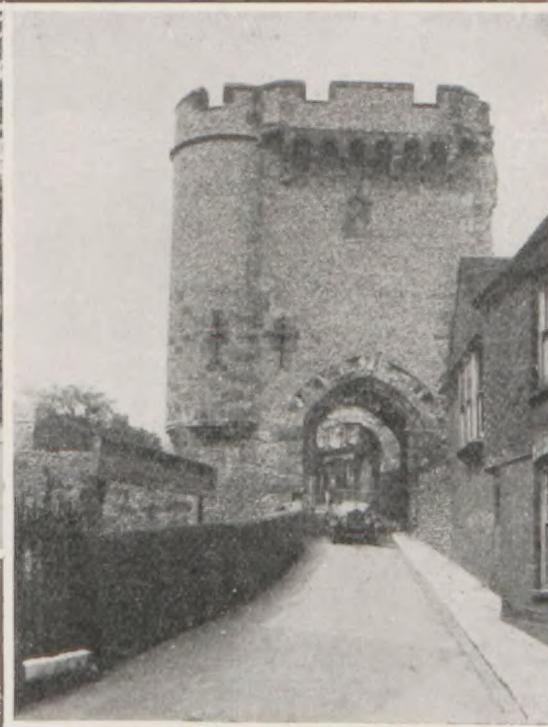
Almost opposite in a large meadow are the remains of the ancient Priory of St. Pancras, which was built at the time of the Castle. It must have been a very wonderful and imposing building. However, Thomas Cromwell, that worthy accomplice of the Royal House-breaker, so thoroughly carried out his master's orders, that there is precious little left of the glorious Priory, which was built at the time of the Castle.

Continuing along the High Street is a small house bearing a tablet to the effect that Thomas Paine lived there. According to the point of view from which he may be regarded, he was either a very clever would-be reformer, as his writings seem to prove, or the equivalent of a present-day Bolshevik. At any rate, he lived many years before his time and, like the prophets of old and most of the present ones, he found no honour in his own country, albeit his writings were thought much of in America at the time. Facing this house is St. Michael's Church, one of the only three surviving Saxon churches in the country having a round tower, and its uncommon shape attracts the eye immediately.

SIX VIEWS OF DELIGHTFUL LEWES.



Barbican House, containing a wonderful collection of interesting antiques.



The Barbican belongs to the time of Edward I, and makes a fine entrance to the castle.



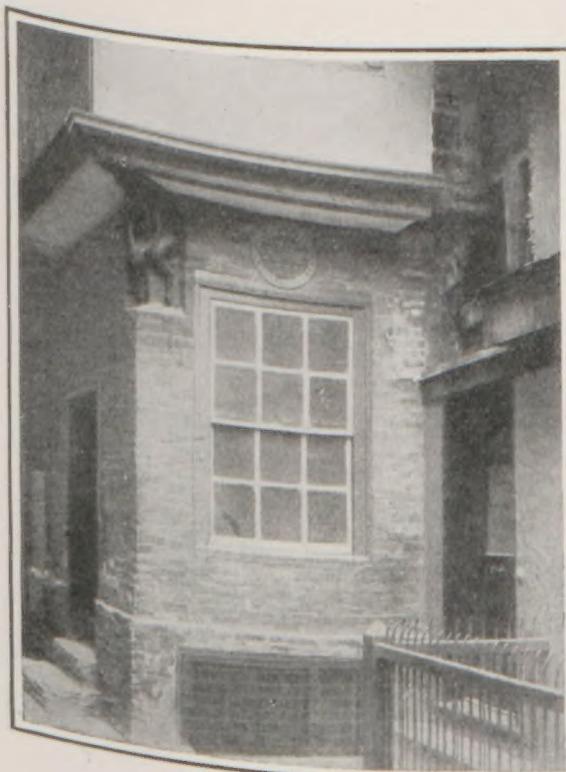
The picturesque old dwelling, granted by Henry VIII to Anne of Cleves.

To the south of the town is Southover Church, containing a modern shrine in Norman style, built to receive the remains of Gundrada, the probable step-daughter of the Conqueror; and her husband, Earl Warenne, who built the Castle and the Priory. The leaden coffins containing their remains were discovered during the construction of the adjacent railway, and these, with the black marble slab with partially defaced lettering which covered Gundrada's tomb, have found a suitable resting place after many vicissitudes.

At the bottom of the steep, narrow Keeve Street, which is a succession of quaint little old houses, is a most perfect example of an Elizabethan dwelling-house called Southover Grange. It probably occupies the site of one of the many granges connected with the old Priory and it is built of material taken from that demolished building. Its grey stone front and low side buildings make a very pleasing picture as the afternoon sun strikes it, and it is the embodiment of a "Haunt of ancient peace."

Apart from everything else, however, Lewes stands out as the scene of Simon de Montfort's battle with Henry III, and his defeat of that faithless and paltry monarch, for this brought about in the following year our first representative Parliament. No one would suggest that the constitution of that body was an ideal one, but it was a beginning, and from it, after many vicissitudes, our present representative government eventually evolved.

K. M. B.



(Left) The house in the High Street where Thomas Paine lived.

(Centre) One of the very uncommon globular sundials.

(Right) The beautiful old porch to Anne of Cleves' house.



BROADCASTING BUSINESS BREVITIES.

Road Laying at Hove.

The Borough Surveyor at Hove has informed the R.A.C. that Church Road, between Holland Road and Osborne Villas—a distance of about half a mile—is to be relaid with new wood blocks. The work has been commenced this week and will be completed in about six weeks. Half of the road will be done at a time, and for the information of motorists the alternative route suggested is *via* Kingsway.

Winter Motoring.

In previous years there has always been a distinct decrease in the use of private motor vehicles in this country during the winter months. The Automobile Association reports that few motorists have given up the use of their vehicles during the present winter.

During the month of December more than 2,000 motorists became members of the Automobile Association, which now has a total membership exceeding 220,000.

Good Team Work.

The 10/15 h.p. Windsor has lately come conspicuously to the front in road competitions, as well as gaining much popularity in every-day service. In the recent strenuous London-Exeter trial a team of three Windsor cars was entered, and each gained the premier award of a gold medal.

A New Appointment.

We have been informed that Mr. Stanley Brotherhood, the chairman of Messrs. Peter Brotherhood, Ltd., of Peterborough, has been appointed chairman of directors of Messrs. Humber, Ltd., of Coventry.

"Quikref" Diaries.

Ranging in price from 1s. 6d. to 23s. 3d., and adapted to a great variety of needs—commercial, personal, professional, trades, social, household, etc.—the original Letts's "Quikref" Diaries, published by Cassell and Co., are so well-known and so highly appreciated that they need no recommendation. A new addition to the 1925 series are Letts's "Belle" Pocket Diaries. This group alone includes ten pocket diaries (prices from 2s. net to 3s. net), nicely bound in Morocco grain leather with attractive designs in embossed colours. Among those for whose peculiar needs Letts's "Quikref" series provides are wireless amateurs, field naturalists, golfers, motorists, engineers, gardeners, allotment and small-holders, "chums" (boys), and even "little folks."

A Festive Evening.

On Wednesday evening, January 7th, the staff and representatives of Messrs. Pritchett and Gold and E.P.S. Co., Ltd., and Peto and Radford, were entertained by the directors at the Bessborough Rooms, Grosvenor Hotel, London, S.W. The first part of the evening was filled by a very enjoyable concert provided by

members of the staff, who displayed exceptionally versatile talent, fully meriting the unstinted applause of a large and appreciative audience.

For a few moments prior to the interval the chairman, Sir Archibald G. Gold, entertained us with a typical cheery, breezy speech, followed in equally happy vein by Mr. Peto. On behalf of the staff, Mr. A. Woodward very suitably thanked the directors.

After refreshments (in the "crush room") Douglas Day's Orchestra provided lively music, which enabled the happy couples to dance away the all-too-short hours until the clock chimed eleven and the band played "The King," which terminated a perfectly happy and enjoyable evening—and so to bed!

"Coming of Age" Celebration.

On January 3rd last, at the Holborn Restaurant, the Essex Motor Club held their "coming of age" banquet and dance—and a wonderfully successful event it proved. Presided over by Mr. S. G. Cummings, the president of the club, there were over 200 members and prominent motoring personalities present.

Among the speakers were Lieut.-Colonel F. S. Brereton, C.B.E., who proposed the Essex Motor Club. He mentioned that the membership now totalled over 200 members and that the club was in a very satisfactory financial position. He dealt with the very first trials of the club, as far back as 1906, and the good work done for crippled children, and, on behalf of the club, presented a handsome silver tea and coffee set to the president to celebrate the club's twenty-first birth-

day. In response, Mr. Cummings continued reflections of past meetings of the club, and gave a brief summary of the programme for 1925; and, happily coinciding with his silver wedding anniversary, he expressed his great appreciation of the club's gift. Mr. Bertram S. Marshall proposed "The Royal Automobile Club and the Auto-Cycle Union," and agitated that British Motor Clubs should strive to bring about road racing in this country. In absence of Commander Armstrong (R.A.C.) and T. W. Loughborough (A.C.U.), Major Granville Kenyon (R.A.C.) responded. Finally, Dr. A. M. Low made a number of presentations on behalf of the club to officials, old-time and founder members, including Mr. S. G. Reynolds and Mr. E. J. Bass, the hon. sec. of the club. The evening proved a very jolly one.

Motor Manuals.

The first of a series of forthcoming motor manuals, intended to present in a simple, non-technical manner the elementary aspects of each branch of the subject, *Automobile Engines*, by A. W. Judge, and published at 4s. net, by Chapman and Hall, Ltd., of 11, Henrietta Street, London, W.C.2, is truly a handy and useful volume, which should be in the possession of all motor owners. It is full of self-explanatory illustrations, much valuable technical information, but minus those horrible technical terms and phrases, and deals with the basic principles, designs, construction, tuning and the general maintenance of automobile and motor-cycle engines. Future issues of the series are in turn to deal with every conceivable branch of the subject. We recommend readers to inspect the first volume—it is sure to give much valuable assistance to the novice—and the expert!

Carburetter Adjustments.

Of recent date several notices have appeared in the Press referring to "benzole shortage" and suggesting a necessity for carburetter adjustment in view of the lower percentage of benzole in the various grades of mixture.

Exhaustive experiments have now been made by the National Benzole Co., Ltd., to ascertain if any carburetter adjustment is necessary in view of the slightly altered constituent parts of National Benzole Mixture, and their experiments prove that the reduction of 10 per cent. benzole in the mixture which has recently been made does not necessitate any alteration from the carburetter setting, providing it is satisfactory for the use of a 50/50 mixture.

Reference has also been made to the price of the mixture, and the National Benzole Co., Ltd., point out that as benzole is now priced at 6d. above petrol, and 40 per cent. of benzole is guaranteed in National Benzole Mixture, and the mixture is sold at No. 1 petrol price, the purchase of benzole in the form of National Benzole Mixture is the most economic method of securing that product.

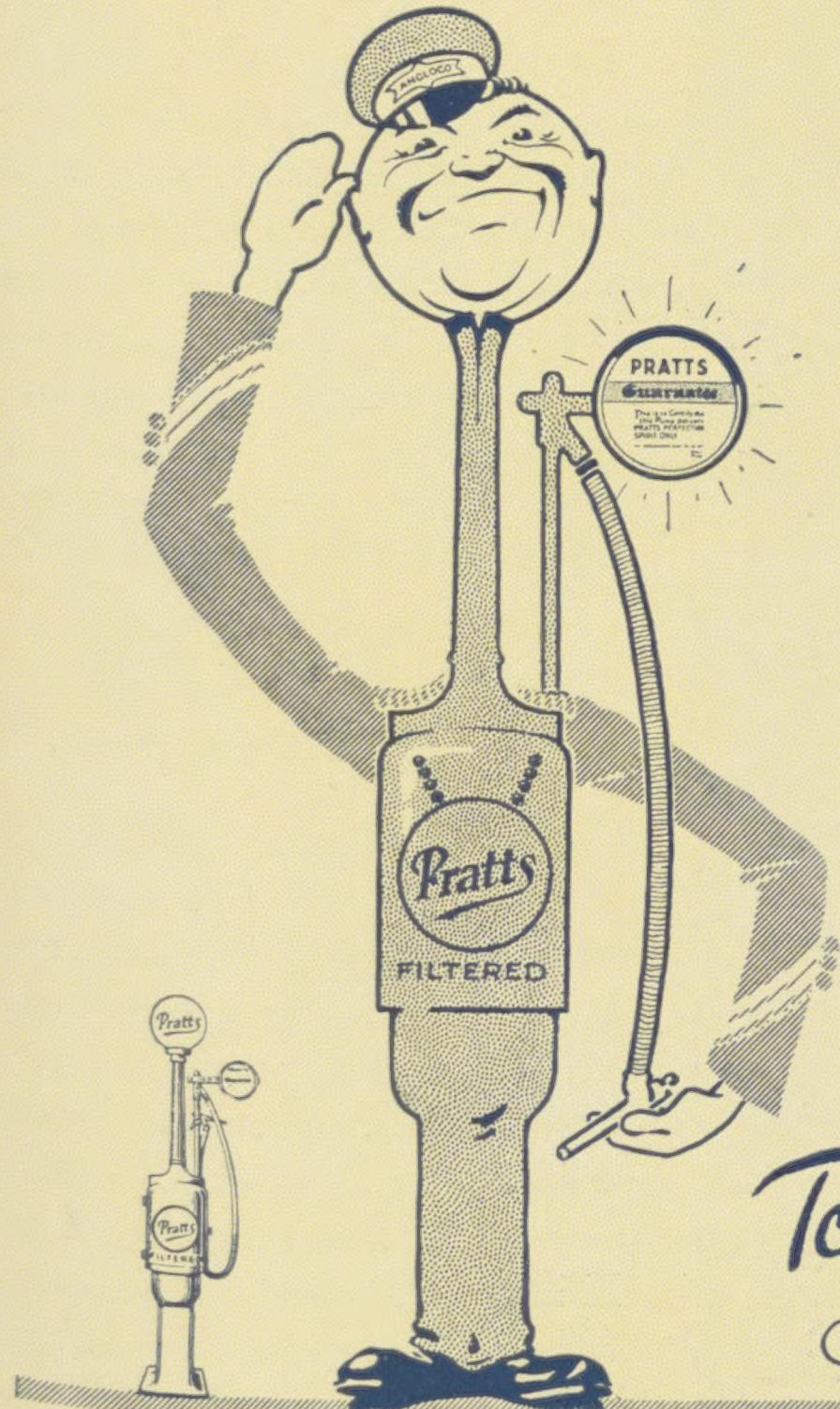


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